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VARIOUS ASPECTS OF A NEW YORK CITY COMMUNITY ZONING PLAN (CZP) ARE EVALUATED IN THIS REPORT. INITIATED IN 1964, THE PLAN WAS DESIGNED TO IMPROVE THE ETHNIC BALANCE IN THE SCHOOLS BY PAIRING SELECTED ELEMENTARY SCHOOLS TO CREATE SINGLE ATTENDANCE ZONES. STUDENTS IN THE LOWER GRADES ATTENDED ONE SCHOOL WHILE THOSE IN THE UPPER GRADES ATTENDED THE OTHER. CLASS SIZES WERE REDUCED, ADDITIONAL TEACHING STAFF HIRED, AND THE NUMBER OF SCHOOL AIDES INCREASED. STATISTICAL DATA ARE PRESENTED ON STUDENTS' ACHIEVEMENT IN READING AND ARITHMETIC, SCHOOL ATTENDANCE AND RACIAL ENROLLMENT, AND PER-PUPIL EXPENDITURES. CURRICULUM PRACTICES AND MATERIALS AND CHANGES IN STUDENTS' BEHAVIOR, INCLUDING THEIR INTERRACIAL RELATIONSHIPS, ARE ALSO REPORTED, AND THE REACTIONS OF TEACHERS AND COMMUNITY ZONING ADMINISTRATORS TO THE PLAN ARE ASSESSED. IN GENERAL, THE ADMINISTRATORS REPORTED THAT MANY ADVANTAGES RESULTED FROM THE PLAN AND THAT ETHNIC BALANCE IN THE RE-ZONED SCHOOLS HAD IMPROVED. HOWEVER, TEACHER REACTION TO THE PROGRAM WAS MIXED. ON STANDARDIZED TESTS STUDENTS FREQUENTLY EXCEEDED THE EXPECTED GAINS. AMONG THE RECOMMENDATIONS MADE BY SCHOOL ADMINISTRATORS ARE SUGGESTIONS FOR THE APPOINTMENT OF MORE EXPERIENCED TEACHERS, LONGER PREPARATION IN THE COMMUNITY BEFORE THE PAIRING OF SCHOOLS, AND THE INTEGRATION OF THE CZP INTO THE MORE EFFECTIVE SCHOOLS PROGRAM. (DK)

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BOARD OF EDUCATION OF THE CITY OF NEW YORK
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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EVALUATION OF THE COMMUNITY ZONING PROGRAM
SUMMARY REPORT

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Introduction

The Community Zoning Plan was put into effect in New York City in September, 1964. The plan provided that selected elementary schools should be paired in the interests of achieving ethnic balance. Thus a school enrolling predominantly Negro and Puerto Rican pupils would be paired with a school enrolling predominantly white children. The communities served by the two schools would become, for school attendance purposes, a single school zone, sending all lower-grade children to one school and all upper grade children to the other. Kindergarten children, however, were to enter the school which they would have attended had there been no rezoning. As schools relatively close to each other were selected for pairing, in order to facilitate travel, the zone for the paired schools was called a Community Zone.

In addition to achieving ethnic balance, the program was intended to further quality education. To the latter end, additional personnel and materials were to be provided to each of the schools involved.

History of the Plan

The basic principles supporting both purposes were defined in a policy statement issued by the Board of Education in May, 1964, and titled "Action Toward Quality Integrated Education." This statement presented in detail data on the schools to be paired under the Community Zoning Plan and those involved in one partial pairing. The partial pairing included P 191 and P 199 Manhattan and involved concentrating all grade 2 children in one school and all grade 4 children in the other school during the first year. This report presents an evaluation of those schools included in both the community zoning and partial pairing experiments.

In the evolution of the plans for school pairings and other plans involving grade reorganization and changed feeder patterns among selected schools, the New York State Education Commissioner's Advisory Committee on Human Relations and Community Tensions played a significant role. In February, 1964, James Donovan, then president of the New York City Board of Education, and Calvin Gross, Superintendent of Schools together requested James Allen, the State Commissioner of Education to direct an evaluation of the practical aspects of the Board's plan for improving education through integration during the 1963-1964 school year. The Commissioner's Advisory Committee, already in existence, was asked to conduct the evaluation. The committee included the following: Dr. John H. Fischer, President, Teachers College, Columbia University, Dr. Judah Cahn, Metropolitan Synagogue, New YorkCity, and Dr. Kenneth Clark, Professor of Psychology, The City College of the City University of New York. The evaluation was conducted with the assistance of the Institute of Urban Studies, Teachers College, Columbia University. The recommendations of this committee were carefully considered before the final pairing plans were drawn up. Additional recommendations were obtained from reports prepared by the Board of Education and the Superintendent of Schools and much valuable thinking on the matter was also contributed by such groups as local school boards, civic and community groups, civil rights organizations and professional organizations.

Ethnic Distribution Before and After Pairing

Eight schools were involved in the Community Zoning Plan. The ethnic distribution in each school before and after pairing is shown in Table 1 below. The following example indicates how this table is to be interpreted:

P 7 and 8 K comprised one pair. Before pairing, P 7 was 3.6 per cent Other, but after it became a grade 5-6 school, the per cent changed to 22.6. P 8, formerly 77.3 per cent Other, after becoming a school for all first to fourth grade children in the Community Zone, became 42.2 per cent Other.

Table 1

Distribution of the Community Zoned Schools
Before and After Pairing

	October, 1963 Before Pairing		October, 1964 After Pairing	
School	Grades	% Other	Grades	% Other*
P. S. 7K	K-6	3.6	K, 5-6	22.6
P. S. 8K	K-6	77.3	K, 1-4	42.2
P. S. 92Q	K-6	.4	K-2	40.7
P. S. 149Q	K-6	87.0	K, 3-6	75.3
P. S. 111Q	K-6	22.1	K, 4-6	49.9
P. S. 112Q	K-6	83.4	K-3	48.6
P. S. 127Q	K-6	6.0	K, 3-6	41.1
P. S. 148Q	K-6	87.3	K-2	61.9

* Includes kindergarten classes which remained ethnically homogeneous

Implementing the Program

The interchange of large numbers of pupils between schools necessitated rearrangements of personnel, equipment, and supplies.

Generally speaking, however, teachers remained in their own schools. Smaller furniture for the lower grade children had to be moved to the lower grade school, and vice versa. Textbooks, library books, and other materials of instruction had to be moved to the appropriate school. This was done, for the most part, by school personnel.

The Community Zoning Plan provided that each school involved should receive educational services beyond those normally supplied to a comparable elementary school. Guidelines which determined the allocation of the additional positions and services were as follows: The program called for an average class size of no more than 27, additional teaching positions in such areas as reading improvement and corrective reading, library, art or music, and health education or science. A non-English speaking or auxiliary teacher was to be allotted, if needed. The following ratios, which were better than comparable City-Wide figures, were established:

one guidance counselor per 500 pupils;
one school secretary per 450 pupils;
one assistant principal for the first 22 teaching positions and one for each 15 positions thereafter.

In addition there was to be one after-school study center for each pair of schools, and the number of school aides was to be increased in each school. Each pupil was allotted an additional $3 for books, supplies and equipment. These additional services were available at the start of the 1964-1965 school year and have generally been maintained since.

The Evaluation

Because of the experimental nature of the Community Zoning concept, the Board of Education and the Superintendent of Schools considered it essential that the overall effects of the program be evaluated. The Office of Educational Research of the New York City Board of Education was designated to conduct the evaluation, which was begun during the 1964-1965 school year.

Consultants. A committee of university consultants was selected to advise in the design of the evaluation and in the interpretation of the results. The committee included the following: Dr. Anne Anastasi, Fordham University; Dr. Dan Dodson, New York University; Dr. Edmund Gordon, Yeshiva University; Dr. Sam Sieber, Institute of Applied Social Research, Columbia University; and Dr. Robert L. Thorndike, Teachers College, Columbia University.

The Superintendent of Schools directed that the evaluation be limited to educational objectives within the school setting. Community opinion and attitudes, as such, were not to be included. At the same time, the Board of Educations' evaluation was progressing, a separate and independent project to survey and interpret community reactions to the zoning plan was begun. This project was conducted by Dr. Bert E. Swanson of Sarah Lawrence College, Bronxville, New York, and supported by a grant from the United States Office of Education. When these separate findings become available, they will assist in the interpretation of the results of the evaluation conducted by the Office of Educational Research.

The evaluation covered the school years 1964-1965 and 1965-1966 and specific aspects of it were assigned to each of three separate research bureaus. The Bureau of Educational Program Research and Statistics completed studies in such areas as ethnic composition of pupil register, average class size and pupil-teacher ratio, unit costs per pupil, pupil attendance and pupil mobility. The Bureau of Educational Research completed studies evaluating results in: academic achievement in reading, mathematics, science and social studies; pupil personal and social growth; reactions of teachers, principals and district superintendents to the experimental plan. Standardized test results, teacher ratings, classroom observations, sociometric scales, and personal interviews were used. The Bureau of Curriculum Research used the interview and questionnaire approach to describe the curriculum in the zoned schools and discuss the manner in which it was implemented.

The full effects of a major change in organization and methods such as the Community Zoning Program become evident only after a considerable extent of time. For this reason, the findings obtainable after two years must be regarded as tentative. They certainly provide much useful information as to the status of matters as of the time of investigation. Moreover, they point up the need for further study of many aspects and implications of this experimental approach to quality integrated education.

CHAPTER 1

SELECTED STATISTICS DESCRIBING THE PROGRAM

The basic goals of the Community Zoning Plan experiment were the establishment of more ethnic balance within the eight paired schools and the provision for a desirable climate in which a quality educational program could develop. In an attempt to achieve the latter objective these schools were provided with smaller than average class sizes, lower pupil teacher ratios, more professional and non-professional personnel and additional allowances for supplies and equipment after the plan went into effect. This section will examine in detail the steps taken to achieve both of these objectives. In addition, data on pupil attendance and pupil mobility for the eight community zoned schools will be presented.

Ethnic Composition of Pupil Register

Prior to the implementation of the Community Zoning Plan in September 1964, the Board of Education rezoned certain pupils in several of the Queens Community Zoned Schools in June 1964 to schools not participating in the experiment. These children were rezoned in order to assure reduced class size and space for additional services in the eight paired schools. Approximately 613 pupils were rezoned from public schools 127Q, 148Q, 92Q, 149Q, and 111Q to nine elementary and one junior high school elsewhere in Queens and this accounts, in part, for the considerable decline in register noted on October 1964 for the eight schools combined.

Table 2, presents October 1963, October 1964 and October 1965 data on the number and proportion of Negro, Puerto Rican and Other pupils enrolled in the eight elementary schools involved in the Community Zoning Plan. The data show that the total pupil register for the experimental schools declined by 1,096 after pairing was effected, a drop of 17.3 per cent from the previous school year. This decline affected only six of the eight schools, the other two having an increase in register. The drop in register was most marked for P.S. 148 Queens. In October 1965 total pupil register had declined by only 168 pupils, or 3.2 per cent, from that of the previous year.

The data also show that a more favorable ethnic balance was achieved as a result of the school pairings. Four schools (P149Q, P148Q, P112Q, P8K), which had less than 15 per cent Negro pupils enrolled in each school on October 1963, a year later had enrolled from 23.7 per cent to 41.5 per cent Negro pupils, the increase ranging from 12.2 per cent for P149Q to 26.8 per cent for P112Q. The remaining four schools, which had pupil registers composed of from 63.1 per cent to 99.0 per cent Negro pupils on October 1963, enrolled considerably fewer such pupils after being paired. In these schools the proportion of Negro pupils on register on October 1964 ranged from 39.5 per cent to 57.2 per cent.

The October 1965 data show that the ethnic composition of the pupil register in the eight paired schools established during the 1964-1965 school year is generally being maintained. Increases or declines in the proportion of Puerto Rican, Negro and Other pupils on register in each of the eight schools during the period October 1964 to October 1965 did not exceed eight per cent, and in several schools (P148Q, P127Q, P112Q) remained very stable.

Table 2

Number and Per Cent of Negro, Puerto Rican, and Other Pupils in Eight Community Zoned Schools October 1963, October 1964, October 1965[a]

	Number												Per Cent of Total								
	October 1963				October 1964				October 1965				October 1963			October 1964			October 1965		
School	PR	N	O	Total	PR	N	O	Total	PR	N	O	Total	PR	N	O	PR	N	O	PR	N	O
P149Q	15	122	920	1,057	8	196	623	827	23	237	541	801	1.4	11.5	87.0	1.0	23.7	75.3	2.8	29.5	67.5
P92Q	3	492	2	497	10	271	193	474	18	247	180	445	0.6	99.0	0.4	2.1	57.2	40.7	4.0	55.5	40.4
P148Q	32	120	1,049	1,201	25	255	454	734	19	256	458	733	2.7	10.0	87.3	3.4	34.7	61.9	2.5	34.9	62.4
P127Q	22	687	45	754	26	502	368	896	40	533	391	964	2.9	91.1	6.0	2.9	56.0	41.1	4.1	55.2	40.5
P112Q	16	126	716	858	61	258	302	621	65	235	283	583	1.9	14.7	83.4	9.8	41.5	48.6	11.1	40.3	48.5
P111Q	154	656	230	1,040	83	307	388	778	88	338	326	752	14.8	63.1	22.1	10.7	39.5	49.9	11.7	44.9	43.3
P8K	58	48	360	466	123	216	248	587	111	211	192	514	12.4	10.3	77.3	21.0	36.8	42.2	21.6	41.1	37.3
P7K	156	303	17	476	86	174	76	336	85	154	54	293	32.8	63.7	3.6	25.5	51.8	22.6	29.0	52.6	18.4
Total	456	2,554	3,339	6,349	422	2,179	2,652	5,253	449	2,211	2,425	5,085	7.2	40.2	52.6	8.0	41.5	50.5	8.8	43.5	47.7

a. All kindergarten pupils remained in their own neighborhood schools after the Community Zoning Plan was implemented.

Average Class Size and Pupil-Teacher Ratio

Average class size and pupil-teacher ratio data for elementary grades 1-8 in the Community Zoned schools, the Special Service Schools, and City-Wide Elementary schools on October, 1963, October, 1964, and October, 1965 are presented in Table 3. Average class size and pupil-teacher ratio are not the same. The difference stems from the fact that not all teachers assigned to a school are in charge of an organized class; though they work with the children, their functions do not include the day-by-day responsibility for a class. Therefore, average class size is computed by dividing the total pupil register of a school by the number of organized classes in that school, while pupil-teacher ratio is obtained by dividing the pupil register by the total number of authorized teaching positions in that school.

The data show that on October, 1964, average class size in the Community Zoned schools, and City-Wide Elementary schools declined from that of the previous October by 4.9 and 0.4 pupils respectively. The trend toward a lower average class size was still evident in October, 1965, though the differences from the previous year's figures were less striking. The Special Service schools changed very little in average class size over the three report periods.

Pupil-teacher ratios in the Community Zoned, Special Service, and City-Wide Elementary schools declined on October, 1964 from the previous year by respectively 6.9, 1.0, and 1.4 pupils. The most marked decline is noted for the Community Zoned schools, and reflects the impact of increased numbers of authorized teaching positions. Pupil-teacher ratios were still lower on October, 1965, though the decline was not so marked as in the previous school year. Though pupil register in the elementary schools has increased each year during the period under study, provision for additional authorized teaching positions has proceeded at a far more rapid rate, especially in the Community Zoned Schools, which accounts for the more dramatic declines in their pupil-teacher ratios.

Table 3

Average Class Size and Pupil-Teacher Ratio, Community Zoned Schools
Special Service Schools, and City-Wide Elementary Schools - Elementary Grades 1-8
October, 1963, October, 1964, and October, 1965

	Average Class Size October			Pupil-Teacher Ratio October		
Type of School	1963	1964	1965	1963	1964	1965
Community Zoned Schools	28.8	23.9	22.5	25.1	18.2	17.0
Special Service Schools	27.9	28.1	27.9	24.2	23.2	22.8
City-Wide Elementary Schools	29.5	29.1	28.7	26.1	24.7	23.1

Pupil Attendance

In comparing figures on attendance, and also on pupil mobility, for the year 1963 before pairing went into effect and the two following years, it was necessary that comparisons at comparable grade levels be made. For example, when attendance figures "before and after" for children of grades 1 through 3 were to be compared in a Community Zone, the figures for attendance of the three grades in each of the two participating schools had to be combined to yield an average rate of attendance for these grades in the two schools. The rate computed was then compared with the rate of attendance in 1964 and again in 1965 of children of grades 1 through 3 in the zoned school.

An analysis of attendance figures for the eight Community Zoned schools for the first five attendance-reporting periods of the 1963-4, 1964-5, and 1965-6 school years was completed The data indicated that in all but two of the eight schools the rate of attendance dropped during the initial year of pairing Of the two schools which did not show declines, P 7 K showed no change in rate while P 149 Q showed an increase in the per cent of attendance. Attendance data for the eight schools for the second school year of the program showed that, in all but one instance, the per cent of attendance increased from the previous year. The one exception was P 112Q, which showed no change from the 1964-1965 school year. For most of the schools showing upward and downward changes in the per cent of attendance during the periods under study, these changes were on the order of two per cent or less. It should be noted here that, of the six schools which showed decreased attendance rates the first year of pairing, five of them showed increased attendance and the remaining one no change during 1965-1966, the second year of pairing. The downward trend generally found in the first year of the Community Zoning experiment appears to have been reversed during the second year. There is insufficient evidence, at present, to determine whether this reversal may be attributable to school pairing. (Table 4)

Pupil Mobility

A study determined the extent of pupil mobility at comparable grade levels for the eight paired schools in the same attendance-reporting periods used for comparison of attendance rates. The figures are shown in Table 5.

The concept of pupil mobility needs explanation. The figure for each school is arrived at by adding the number of children admitted during a given period to the number discharged during the same period, and then dividing the sum by the average register for the same period. The number of children admitted at the opening of school who have not attended school before (first-grade or kindergarten children) is excluded from the total of admissions. Figures for these children are admissions to be expected yearly; the admissions used in the formula for pupil mobility generally represent transfers from other schools.

The method of computation must be borne in mind by anybody reading mobility figures. Let us take an example from Table 5. The 1965-66 mobility rate of 64.6 per cent for P 148 Q should not be interpreted to mean that, at the end of that school year, only 35.4 per cent of the September pupil register remained in the school. A large proportion of the children may have remained in the school throughout the year. The mobility figure represents those who left and the children newly admitted from time to time during the year. Mobility rates as computed reflect the total impact of admissions and transfers during the year, with consequent additional paper work, class reorganization, and like complications.

The data in Table 5 show that the mobility rate for each of the eight zoned schools during the first five attendance reporting periods of the 1964-1965 school year ranged from 28.4 per cent in P 111Q to 63.8 per cent for P 92Q. Without exception, the mobility rate for each school studied increased from the previous school year, the increases ranging from 0.5 per cent for P 8K to 16.7 per cent for P 149Q. It is interesting to note that those schools that were reorganized in 1964-1965 to include only grades 1-2, 1-3 or 1-4 had, with no exception, considerably higher pupil mobility rates than those reorganized to include only grades 5-6 or 4-6. There was more mobility among the younger children.

For the first five attendance reporting periods of the following school year, the mobility rate for each of the eight paired schools ranged from 19.5 per cent for P 111Q to 64.6 per cent for P 148Q. The mobility rate for six of the eight schools studied declined from the previous year, the declines in rate ranging from 1.3 per cent for P 7K to 15.7 per cent of P 92Q.

Two schools, P 148Q and 149Q, showed mobility rates higher than those of the previous year, the increases being respectively 15.6 per cent and 5.0 per cent. Prior to pairing in the Fall of 1964 these two schools had pupil registers composed predominantly of Other pupils. Since the schools became zoned, the mobility rate in each of them has steadily increased from year to year. It should be noted here that no system-wide comparable data on pupil mobility are available which might provide useful comparison with the mobility data obtained for the zoned schools. The data presented here are useful in that they compare mobility rates before and after pairing.

Table 4

Average Register and Per Cent of Attendance
in the Community Zoned Schools: Comparison of the
First Five Reporting Periods* of 1963-64, 1964-65 and 1965-66,
at Comparable Grade Levels

		63-64		64-65		65-66			63-64		64-65		65-66	
School	Grades	Avg. Rgstr.	% Att.	Avg. Rgstr.	% Att.	Avg. Rgstr.	% Att.	Grades	Avg. Rgstr.	% Att.	Avg. Rgstr.	% Att.	Avg. Rgstr.	% Att.
P.S. 7 K	5-6	124.1	90.8	203.2	91.0	189.1	92.4	1-4	273.3	90.0				
P.S. 8 K	5-6	106.2	93.1					1-4	286.4	91.1	527.1	88.9	457.5	89.4
P.S. 92 Q	1-2	181.4	89.1	296.4	84.1	334.3	83.8	3-6	209.7	90.7				
P.S. 149 Q	1-2	306.0	90.4					3-6	494.2	90.4	564.1	92.3	590.9	92.8
P.S. 111 Q	4-6	422.8	92.3	645.6	90.4	552.9	92.9	1-3	454.0	88.5				
P.S. 112 Q	4-6	436.2	92.9					1-3	294.0	91.6	510.4	89.6	442.1	89.8
P.S. 127 Q	3-6	390.5	93.3	793.2	88.6	805.6	90.9	1-2	234.2	90.4				
P.S. 148 Q	3-6	664.1	91.7					1-2	310.6	89.7	506.3	88.4	466.4	93.2

* 9/9/63 - 3/6/64; 9/14/64 - 3/12/65; 9/13/65 - 3/11/66.

Table 5

Per Cent of Pupil Mobility and Average Register at Comparable Grade Levels in the Community Zoned Schools First Five Attendance Reporting Periods School Years 1963-1964 through 1965-1966

School	1963-64 Average Register	1963-64 Per Cent Mobility	1964-65 Average Register	1964-65 Per Cent Mobility	Per Cent Change 63-64 to 64-65	1965-66 Average Register	1965-66 Per Cent Mobility	Per Cent Change 64-65 to 65-66
PS 7K	124.1	26.6	203.2	32.0	+ 5.4	189.1	30.7	- 1.3
PS 8K	286.4	43.7	527.1	44.2	+ 0.5	457.5	42.6	- 1.6
PS 92Q	181.4	50.7	327.4	63.8	+13.1	345.3	48.1	-15.7
PS 149Q	494.2	22.1	564.1	38.8	+16.7	590.9	43.8	+ 5.0
PS 111Q	422.8	14.9	645.6	28.4	+13.5	552.9	19.5	- 8.9
PS 112Q	294.0	26.9	510.4	36.4	+ 9.5	442.1	27.6	- 8.8
PS 127Q	390.5	44.3	793.2	59.1	+14.8	805.6	47.3	-11.8
PS 148Q	310.6	36.7	506.3	49.0	+12.3	487.8	64.6	+15.6

Pupil Discharges

Data on the number and per cent of pupils discharged during the 1964-1965 and 1965-1966 school years from the eight community zoned schools and the type of school (public, private, parochial) to which they were discharged are presented in Tables 6 and 7. The data show that, during the first school year of the program, a total of 1,372 pupils were discharged from the eight schools and this represented 26.1 per cent of the total pupil register in the schools (Table 6). This may be compared with a city-wide discharge rate in the elementary schools of approximately 12 per cent. When the three ethnic groups are considered separately, it is seen that 14.1 per cent of the Negro pupils, 29.1 per cent of the Puerto Rican pupils and 35.5 per cent of the Other pupils were discharged to other schools during the school year.

Similar data for the following school year are also presented in Table 6. The data show that a total of 1,074 pupils were discharged during the year, or 21.1 per cent of the total number on register. This was a decline of 5.0 per cent from the previous year. When the ethnic sub-groups are again considered, 14.7 per cent of the Negro pupils, 30.5 per cent of the Puerto Rican pupils and 25.2 per cent of the Other pupils on register were discharged. The proportion of Negro and Puerto Rican pupils discharged during this school year increased slightly from the previous year, while the proportion of Other pupils discharged in relation to the total register for this group declined by a noteworthy 10.3 per cent.

Table 6

Number and Per Cent of Puerto Rican, Negro and Other Pupils Discharged During the School Years 1964-1965 and 1965-1966 from Eight Community Zoned Schools in Relation to Total Pupil Register in the Eight Schools, All Schools Combined

	Total Discharges	1964-1965 Total Pupil Register	Per Cent of Total Register	Total Discharges	1965-1966 Total Pupil Register	Per Cent of Total Register
N	308	2,179	14.1	326	2,211	14.7
PR	123	422	29.1	137	449	30.5
O	941	2,652	35.5	611	2,425	25.2
Total	1,372	5,253	26.1	1,074	5,085	21.1

Additional data on the number and per cent of Puerto Rican, Negro and Other pupils discharged to public schools in New York City, to parochial schools in New York City, to private independent schools in New York City, and to schools outside New York City during the 1964-1965 and 1965-1966 school years are presented in Table 7. For the purpose of this study, P 7 and 8 K have been considered as one organization because both schools are administered by a single principal and the data on discharges reported for the two schools for 1964-1965 were combined. The data show that the total number of pupils discharged to public schools, parochial schools, and private independent schools in New York City declined in the 1965-1966 school year from the previous year, while the total discharges to schools outside New York City increased. This pattern is generally maintained when the ethnic sub-groups are considered separately. The data further indicate that pupil discharges to other public schools in New York City generally are in proportion to the ethnic composition of the zoned schools for each of the two school years under study. However, pupil discharges to parochial and private independent schools, and to schools outside New York City are disproportionately Other. This is true generally for each of the zoned schools during the two school years under study. Separate school data on pupil discharges are presented in tables in the supporting documents filed with this report.

Table 7

Number and Per Cent of Negro, Puerto Rican and Other Pupils Discharged During the 1964-1965 and 1965-1966 School Year from Community Zoned Schools to Other Schools by Ethnic Background

	To Public Schools in N.Y.C.		To Parochial Schools in N.Y.C.		To Private Independent Schools in N.Y.C.		To Schools Outside N.Y.C.		Total	
	64-65	65-66	64-65	65-66	64-65	65-66	64-65	65-66	64-65	65-66
Negro	243	215	17	15	10	6	38	90	308	326
Puerto Rican	63	94	40	30	3	1	17	12	123	137
Other	321	174	239	160	169	45	212	232	941	611
Total	627	483	296	205	182	52	267	334	1,372	1,074
					Per Cent					
Negro	38.8	44.5	5.7	7.3	5.5	11.5	14.2	26.9	22.4	30.4
Puerto Rican	10.1	19.5	13.5	14.6	1.6	1.9	6.4	3.6	9.0	12.8
Other	51.2	36.0	80.7	78.1	92.9	86.6	79.4	69.5	68.6	56.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Per Capita Costs of Instruction Proper

The purpose of this section of the report is to show how the New York City School District is financing the instructional program proper in the eight Community Zoned schools. The direct instructional costs include salaries paid, expenditures for supplies and equipment, and custodial expenditures (labor and supplies).

Table 8, presents data on per pupil costs of instruction in average daily attendance for the eight paired schools for the school years 1963-1964, 1964-1965, and 1965-1966, the school years before and after the Community Zoning Plan was implemented. The table shows that the per capita cost of instruction for the eight schools combined in 1964-1965 was $555.91, an increase of 42.95 per cent over that of the previous year. If the eight schools are studied separately, it is clear that in each instance the per pupil costs increased considerably from the previous year, the increases ranging from 26.25 per cent for P8K to 62.70 per cent for P148Q.

The appreciable increase in per pupil costs noted for all eight schools can be traced to a number of factors. Each of the paired schools received an additional allotment of three dollars per capita for supplies and equipment above the basic per capita allotment. However, the addition of personnel has most markedly increased the costs. The eight schools received additional pedagogical and non-pedagogical positions above the normal allocation for having been involved in the pairing. It should also be pointed out here that a considerable portion of the increase in pupil costs noted for the eight schools combined or separately may be attributed to factors other than participation in the zoning experiment. The marked increases in salary expenditures noted in 1964-1965 for the eight schools have also been affected by salary increases resulting from general pay increases granted to all teachers and from normal salary increments, factors completely unrelated to school pairing.

The actual increases in payroll costs resulting from the allocation of additional positions can be illustrated by citing what P112Q received in additional positions during the 1964-1965 school year. This is only one example of the increases received by each of the eight schools according to their several needs.

4 Other Teaching Positions (OTP), 1 and 2/5 guidance positions,
2/5 school secretary positions, 1 assistant principal position.

These 6 and 4/5 additional positions can be converted to actual costs to illustrate this increased allowance as expenditure. Using the September 30, 1964 average salary for each type of position available in a report prepared by the Office of Business Affairs, these additional positions cost, approximately, $70,000 annually. The only other program with unit costs per pupil for instruction exceeding those of the Community Zoned schools is the More Effective Schools Program.

Table 8 also shows that the per capita cost of instruction proper for the eight schools combined for the 1965-1966 school year was $593.61, an increase of 6.78 per cent over the figure for the previous year. For all but one of the schools, the per pupil costs continued to rise, the increases ranging from 0.6 per cent for P7K to 24.29 per cent for P8K. For five of the eight schools the increase in per pupil costs was less than ten per cent. Only P92Q showed a decline in per pupil instructional costs, the decline being 18.07 per cent. This drop in costs is primarily the result of a decline in expenditure for salaries of approximately $46,000 from the previous year. The decreased expenditure represents an administrative adjustment and not a decrease in service to children.

The increases in per pupil costs in 1965-1966 over the previous year for the eight schools are relatively small when compared with the increases noted for 1964-1965. The data show that the addition of pedagogical and non-pedagogical personnel and the additional allotment for supplies and equipment is, generally, being maintained in 1965-1966. Whatever increases in expenditures and per pupil costs for instruction proper are observed for 1965-1966 are probably the result of contractual salary increases and normal increment increases rather than the further infusion of numbers of additional personnel.

Table 8

Expenditures Per Pupil In Average Daily Attendance for Instruction Proper - Eight Community Zoned Schools, Before and After Pairing School Years 1963-1964, 1964-1965, and 1965-1966

School	1963-1964	1964-1965	1965-1966	Per Cent Change From 63-64 to 64-65	Per Cent Change From 64-65 to 65-66
P 149Q	329.61	460.25	530.47	+39.63	+15.26
P 92Q	491.35	740.87	606.96	+50.78	-18.07
P 148Q	347.65	565.64	588.49	+62.70	+ 4.04
P 127Q	365.52	490.87	541.19	+34.29	+10.25
P 112Q	369.12	592.29	643.47	+60.46	+ 8.64
P 111Q	468.28	618.51	659.79	+32.08	+ 6.67
P 8K	398.82	503.51	625.81	+26.25	+24.29
P 7K	421.77	609.57	613.62	+44.53	+ 0.6
All 8 Schools Combined	388.88	555.91	593.61	+42.95	+ 6.78

Summary

The findings showed that a more favorable ethnic balance was achieved in the eight zoned schools as a result of the school pairings. The four schools which enrolled predominantly. Other pupils prior to pairing enrolled considerably more Negro and Puerto Rican pupils in the first year of the experiment. The remaining four schools which enrolled predominantly Negro and Puerto Rican children prior to pairing, had considerably lower proportions of such children in the first year of the plan. In general, this favorable ethnic balance was continued in the second year of the experiment.

Analysis of pupil-teacher ratio and average class size data for the eight zoned schools during the first and second years of the program show that these have remained considerably below comparable data on class size and pupil-teacher ratio for city-wide elementary schools.

Analysis of pupil attendance during both years studied showed that the upward and downward changes in attendance rates were on the order of two per cent or less and there is insufficient evidence at present to determine whether these changes are attributable to the school pairing plan.

The findings with regard to pupil mobility showed that during the first year of the program the mobility rate for each of the eight schools increased from the previous year. Analysis of mobility data in the second year of the program showed the reverse of what had occurred during the first. In six of the eight schools, the mobility rate declined in the second year of the program. The data also showed that mobility was more apt to occur among children in the lower grades.

Pupil discharge data for the eight zoned schools in the first and second year of the program were analyzed. The data showed that in the first year 26.1 per cent of the total number on register in the eight schools combined were discharged and this rate was considerably above the city-wide annual discharge rate of approximately 12 per cent. In the second year the discharge rate for pupils in the eight schools combined declined to 21.1 per cent, but was still above the city-wide discharge rate. The data also showed that pupil discharges to private independent and parochial schools were disproportionately Other.

Direct per-pupil instructional costs in the eight zoned schools were also analyzed. The data showed that in the first year of the program such costs for all eight schools combined increased by 42.95 per cent from the previous year. The findings are approximately the same when the data for each school are considered. In the second year of the program these costs were found to increase slightly. The large increase in per pupil instructional costs in the first year was primarily the result of the assignment of additional pedagogical personnel to the schools to reduce class size and improve opportunities for a quality educational program.

CHAPTER 2

REPORT ON INTERVIEWS WITH COMMUNITY ZONING ADMINISTRATORS

This section presents the results of interviews with three assistant superintendents in whose districts the Community Zoning Plan was implemented and with the nine principals of the schools involved in the Community Zoning and Partial Zoning Plan. The findings on problems and accomplishments resulting from the program and recommendations for improvement presented here are for the 1964-1965 and 1965-1966 school years, and represent data obtained from two interviews held once in the fall term and once in the spring term with each group in each of the two years studied. Much information was obtained from the interviews and the highlights are presented in this report.

Problems resulting from the Community Zoning Plan

During the interview held in January of 1965, the first year of the study, the assistant superintendents and principals were asked to mention the major problems encountered in implementing the Community Zoning Plan. The following major problems were indicated in their responses:

a. The time interval between the final decision to proceed with the program and the actual start was so brief that organizational and administrative procedures could not be developed adequately.

b. The initiation of busing created scheduling problems.

c. The movement of books and materials from building to building and within buildings was difficult.

d. Opposition to the experimental program by some parents and community groups interfered with its initial operation in many of the schools.

e. Lunchroom facilities in some schools were inadequate.

f. There was insufficient storage space for the new materials provided.

g. Office space for special subject and remedial teachers was inadequate.

h. Inadequate and inconvenient toilet facilities for pupils increased administrative problems.

i. The I.G.C. classes organized in accordance with established criteria were almost entirely composed of white children.

j. Organization of classes on an ethnic instead of an achievement basis resulted in a wide range of ability in these certain classes, which made teaching more difficult; however, this problem was eased to some extent by the smaller class size, the use of OTP specialists, and ability grouping within each classroom.

k. There were too few classes organized for educating the emotionally maladjusted children.

l. The continued heavy visitation by outsiders, such as journalists, university personnel and Board of Education personnel, created additional problems.

When interviewed in May for the second time that year, the district superintendents indicated that they had been able to solve many of the original problems mentioned in the first interview. However, when asked whether any new problems had arisen since the initial interview, they spoke of the following:

a. Increased guidance program in the schools made increased demands upon the principal's time in terms of orientation.

b. Certain schools still had too many probationary teachers.

c. Additional corrective reading teachers were needed in some schools.

d. Certain critics among community groups felt that the program did not go far enough in promoting integration; they urged termination of classes for the intellectually gifted and demanded that the teachers be trained by specialists.

Many of the problems cited in interviews during the first year of the program were reported to be still present in the second year. Both the district superintendents and the principals indicated the following:

a. Some parent opposition to the program continues.

b. Many aspects of busing remain a problem, such as too few buses and poor scheduling of pickups.

c. Lunchroom facilities in some schools remain overcrowded due to the increased number of children who receive free lunch.

d. The discipline problem has increased, especially in those schools that enrolled predominantly white pupils prior to pairing.

e. Certain staffing problems remain. Some teachers have proven to be insensitive to the demands of this particular program. Also, some O.T.P.'s are not specialists, but simply classroom teachers with seniority.

f. Lack of storage space remains a problem in some schools.

Accomplishments of the Community Zoning Plan

In the course of the interviews held during both school years, the administrators were asked to cite the accomplishments of the program. In the interviews held near the end of the first year of the experimental program, the following accomplishments were mentioned by the administrators:

a. Greater understanding between parents of different ethnic background had been observed in such situations as Parent Association meetings.

b. Some parents who had initially opposed the program later expressed satisfaction with the way it was developing.

c. Principals and teachers have grown professionally as a result of having to look at things in a new way.

d. Average class size was reduced to the low 20's, thus creating increased opportunities for individualized instruction.

e. The teaching load of the classroom teacher was reduced because of the addition of more teachers.

f. Some principals felt that there was an observable improvement in reading for some pupils, especially in the primary grades.

g. Teacher specialists, particularly in art and science, exerted positive influence upon the classroom. The guidance program was also definitely improved.

h. There was an increase in suitable books and supplies.

i. The establishment of after-school study centers aided the program.

j. Many teachers who originally expressed misgivings about school pairings had many of their doubts removed.

The data on accomplishments of the program obtained from interviews with the administrators during the 1965-1966 school year, the second year of the program, are, in many instances, similar to those obtained from the first year interviews. The following is a summary of the accomplishments referred to in the interviews:

a. There is evidence of increased understanding between white and negro parents and children.

b. Average class size continues to remain much below the city-wide average for elementary schools.

c. The continued use of O.T.P. specialists in such curriculum areas as music, art, science, reading, mathematics. library and health education provides opportunities for individualized instruction and more small-group instruction.

d. Parent interest in the school activities of their children has increased.

e. The problem of wide-range ability groupings within classes has been considerably offset by smaller class sizes, additional and suitable instructional materials, and teacher specialists.

f. Many more textbooks and library books have been obtained, including a number of inter-racial books portraying white and negro children and adults together at work and play.

g. The presence of increased numbers of O.T.P.'s has made it possible to set up meaningful club programs for the children in such areas as art, music and science.

Recommendations

The administrators interviewed made certain recommendations regarding the improvement of the program in order to increase the possibilities for its success. The following is a summary of these recommendations made by the district superintendents and principals during the first year of the program.

a. Appointment of experienced personnel to the Community Zoned Schools should be given top priority.

b. More Negro staff members should be assigned to these schools.

c. Classes similar to the Junior Guidance Classes should be organized in the schools for truly disruptive pupils.

d. Should future school pairingsbe comtemplated, provision for a longer period of community preparation should be made.

e. Principals of Community Zoned Schools should be provided with additional administrative assistants because of increased administrative burdens resulting from the program.

Recommendations and suggestions resulting from interviews during the second year of the program included the following:

a. Where modernization of the physical plant is necessary for effective implementation of the program within a school, it should be done prior to the pairing.

b. Provide school furniture suitable to the age of the children.

c. Provide additional buses in instances where buses are so crowded that children are required to stand.

d. The principal should be given considerable discretion in the selection and appointment of teachers. To a very large extent, the success of the program is dependent upon the ability, motivation, and attitude of the teacher.

e. The Community Zoning Program should become part of the More Effective Schools Program and receive all the increased services that the latter schools do.

f. Within each school, the principal should be permitted to establish, as needed, classes for disruptive pupils.

g. The use of O.T.P.'s should be completely at the discretion of the principal. If necessary, the principal should be able to assign an O.T.P. to regular classroom duties.

The recommendations presented above are, in most instances, applicable to all the schools involved in the program, while others may apply to one or a number of the schools. To further strengthen this experimental approach to quality integrated education, the district superintendents have made provision in their districts for parent workshops, courses in Negro history for teachers, and the formation of district committees to study problems and suggest solutions.

Summary

The following major problems were cited by three assistant superintendents and nine principals involved in the Community Zoning program during interviews held in the first and second years of the program:

a. The time interval between the final decision to proceed with the program and the actual start was too brief to develop adequate organizational and administrative procedures.

b. Parent and community group opposition to the program interfered with the initial operation of it in a majority of the schools. This was especially true in the first year.

c. The program of increased busing and the movement of books and materials from building to building created difficulties.

During the same interviews the following accomplishments of the program were cited:

a. Average class size was considerably reduced at the start and remained so during both years.

b. There was evidence of increased understanding among parents and pupils of all ethnic groups.

c. The use of teacher specialists has provided opportunities for individualized and small group instruction.

CHAPTER 3

ACHIEVEMENT IN READING AND ARITHMETIC

This chapter presents evidence of the effect of the Community Zoning Program on pupil growth in academic achievement in terms of standardized test results. The Metropolitan Achievement Tests in reading and arithmetic were administered to the pupils in Grades 2 through 6 in all eight schools. Alternate forms were given at initial and final test time.

All pupils from Grades 2 through 6 of Community Zoned schools participated. As part of the citywide testing program the initial tests were given in November 1964 and the final tests in May 1966. The subtests included word knowledge and reading comprehension. The arithmetic computation and problem solving tests were given only in November 1964 and April 1965.

Since one of the major purposes of the evaluation was to obtain data on possible differential functioning of pupils according to the various aspects and conditions of the Community Zoning program, the students were classified into several subgroups for research purposes. There were three ethnic groups: Negro, Puerto Rican and Other. The scores were analyzed by pupil groups according to whether the pupils originally attended a school whose enrollment was predominantly Negro and Puerto Rican, or predominantly Other. Pupils were also grouped according to whether they were attending the same school which they had attended prior to June 1964 (the "Home" group,) or had been transferred to the other school of the pair, requiring them generally to travel a somewhat longer distance (the "Travel" group).

Specifically, the questions at issue are the following:

What is the progress in reading and arithmetic in relation to national norms of the following groups and subgroups of pupils in the Community Zoning Program?

- All children in the Community Zoned schools
- Pupils who were transferred from schools enrolling predominantly Other children
- Pupils who were transferred from schools enrolling predominantly Negro and Puerto Rican children
- Pupils who in September 1964 were transferred to a new school requiring longer travel from home (Reading)
- Pupils who in September 1964 remained in the school they had attended in June 1964 (Reading)
- Sample analysis of individual pupils gains (Reading)

Table 9 presents the median grade scores obtained on the Metropolitan reading tests, relating the median scores to the national norms. The period of time between initial and final testing was 1.5 school years or 15 school months. The medians are based on the scores of all pupils tested in the eight community zoned schools for each of grades 3, 4, 5 and 6. Since the initial tests were administered in November, 1964, the third month of the school year, the initial norm is 2.3 for the third grade, 3.3 for the fourth grade, and so on. The final tests were administered in May, 1966, fifteen school months after the initial test. The norm at the time of final testing is therefore 3.8 for the second grade pupils who had been promoted to the third grade, 4.8 for the third grade pupils who had been promoted to the fourth grade, and so forth for the fifth and sixth grades.

As indicated in Table 9 the obtained median scores when compared with the norms at initial test time showed differences ranging from -.3 of a school year for the current grade 3 to +.2 of a school year for current grade 5. At final test time the corresponding differences ranged from zero to +.6 of a school year.

The net change in the median grade score achieved was positive in each grade except in the fourth, in which there was no change. The greatest net change may be seen to have occurred in the sixth grade, where the initial score was -.2 of a school year below the norm, but the final score was +.6 of a school year above the norm. This represents a net change of .8 of a school year over the 1.5 school year period from initial to final test.

Table 9

Comparison of Grade Norms and Median Grade Scores Obtained on the Metropolitan Reading Tests at Initial and Final Testings in All Community Zoned Schools

		Grade Score Achieved	Norm at Testing	Comparison with Norm	Net Change
Grade 3 N=389	Initial	2.0	2.3	-.3	+.3
	Final	3.8	3.8	0.0	
Grade 4 N=363	Initial	3.4	3.3	+.1	0
	Final	4.9	4.8	+.1	
Grade 5 N=385	Initial	4.5	4.3	+.2	+.1
	Final	6.1	5.8	+.3	
Grade 6 N=409	Initial	5.1	5.3	-.2	+.8
	Final	7.4	6.8	+.6	

In Table 10 the gains in grade score from initial to finaltesting are compared with the elapsed time between testings, or 1.5 school years. During 1.5 school years, the expectation on the basis of the national norms is that the median grade score will improve by 1.5.

Table 10 gives the results for grades 3, 4, 5 and 6, based on the total population of pupils tested in all the community zoned schools. The obtained grade scores for the upper quartile Q_3, for the median, and for the lower quartile Q_1 are presented for both the initial and the final testing in each of the four grades.

The table reveals that the gain in grade score was greater than the elapsed time in the majority of instances. The most noteworthy results are the very large gains made at the upper quartile, Q_3, in the fifth grade, and, to a lesser extent the large gains made at the median and at Q_3 in the sixth grade. There is a tendency for the gains to be greater at higher levels of achievement. At all grades, the largest gains were recorded at the upper quartile, with a smaller gain at the median, and the least gain at the lower quartile.

In general, the pupil gains in grade score were favorable when compared to the elapsed time between testings, especially for the higher achieving groups at Q_3.

Table 10

Grade Score Gains for each Grade Compared with Elapsed Time at Q_3, Median, Q_1 on the Metropolitan Reading Tests for All Community Zoned Schools

		11-64 Testing	5-66 Testing	Gain	Elapsed School Yrs.
Grade 3 N=389	Q_3	2.7	4.8	2.1	1.5
	Mdn	2.0	3.8	1.8	
	Q_1	1.5	3.1	1.6	
Grade 4 N=363	Q_3	4.1	6.7	2.6	1.5
	Mdn	3.4	4.9	1.5	
	Q_1	2.4	3.8	1.4	
Grade 5 N=385	Q_3	5.9	9.6	3.7	1.5
	Mdn	4.5	6.1	1.6	
	Q_1	3.2	4.5	1.3	
Grade 6 N=409	Q_3	7.8	10.2	2.4	1.5
	Mdn	5.1	7.4	2.3	
	Q_1	4.0	5.2	1.2	

Table 11

Comparison of Grade Norms and Median Grade Scores Obtained on the Metropolitan Reading Tests at Initial and Final Testings in all Community Zoned Schools For Pupils who in June 1964 Attended Schools Predominantly Negro and Puerto Rican or Predominantly Other

		Grade Score Achieved	Norm at Testing	Comparison With Norm	Net Change
Pupils from Schools Originally Predominantly Other					
Grade 3 N=182	Initial	2.3	2.3	0	+ .8
	Final	4.6	3.8	+.8	
Grade 4 N=204	Initial	3.7	3.3	+.4	+ .4
	Final	5.6	4.8	+.8	
Grade 5 N=211	Initial	5.0	4.3	+.7	+1.7
	Final	8.2	5.8	+2.4	
Grade 6 N=247	Initial	7.0	5.3	+1.7	+1.1
	Final	9.6	6.8	+2.8	
Pupils from Schools Originally Predominantly Negro and Puerto Rican					
Grade 3 N=207	Initial	1.8	2.3	-.5	+ .2
	Final	3.5	3.8	-.3	
Grade 4 N=159	Initial	2.8	3.3	-.5	0
	Final	4.3	4.8	-.5	
Grade 5 N=174	Initial	3.5	4.3	-.8	- .1
	Final	4.9	5.8	-.9	
Grade 6 N=162	Initial	4.4	5.3	-.9	- .2
	Final	5.7	6.8	-1.1	

Each pair of schools in the community zoning program consisted of one school which had been predominantly Negro and Puerto Rican in pupil population, and one school which had been predominantly Other. One of the main objectives of the zoning plan was to increase racial integration by means of the rearrangement of school zones and grades. Relevant to the evaluation of pupil achievement in the program are two related questions. How did the Negro and Puerto Rican pupils coming from schools which originally were predominantly Negro and Puerto Rican in pupil register achieve in reading under the new integrated program? Similarly, what progress was made in reading achievement by the pupils from schools which originally were predominantly Other in pupil register?

The initial and final median grade scores obtained by both groups of pupils for all the community zoned schools are presented in Table 11. The initial test was administered in November 1964 and the final test in May 1966. A reading of Table 11 shows that obtained median scores of pupils from schools originally predominantly Other when compared with the norms at initial test time ranged from zero for current third grade to +1.7 school years for the current sixth grade. At final test time the corresponding differences ranged from +.8 of a school year for current third grade and fourth grade respectively to +2.8 school years for current sixth grade. As indicated in the last column of the table the net changes for this group of pupils were all positive ranging from +.4 of a school year at grade 4 and +1.7 school years at grade 5.

Obtained median scores of pupils from schools originally predominantly Negro and Puerto Rican when compared with the norms at initial test time ranged from -.5 of a school year for current third and fourth grade to -.9 for current sixth grade. At final test time the corresponding differences ranged from -.3 school years for the current third grade to -1.1 school years for the current sixth grade. The net changes for this group of pupils varied from -.2 of a school year at grade 6 to +.2 of a school year at grade 3.

It is also clear that the Other pupils obtained higher median scores than did the Negro and Puerto Rican pupils on both the initial and final tests at all grade levels.

Table 12

Grade Score Gains for Each Grade Compared with Elapsed Time at Q_3, Median, Q_1 on the Metropolitan Reading Tests for All Community Zoned Schools for Pupils who in June 1964 Attended Schools Predominantly Negro and Puerto Rican or Predominantly Other

		11-64 Testing	5-66 Testing	Gain	Elapsed School Years
Pupils from Schools Originally Predominantly Other					
Grade 3	Q_3	3.2	5.5	2.3	1.5
N=182	Median	2.3	4.6	2.3	
	Q_1	1.7	3.5	1.8	
Grade 4	Q_3	4.6	8.0	3.4	1.5
N=204	Median	3.7	5.6	1.9	
	Q_1	3.0	4.5	1.5	
Grade 5	Q_3	7.1	10.3	3.2	1.5
N=211	Median	5.0	8.2	3.2	
	Q_1	4.0	5.6	1.6	
Grade 6	Q_3	9.1	10.9	1.8	1.5
N=247	Median	7.0	9.6	2.6	
	Q_1	4.9	6.5	1.6	
Pupils from Schools Originally Predominantly Negro and Puerto Rican					
Grade 3	Q_3	2.3	4.6	2.3	1.5
N=207	Median	1.8	3.5	1.7	
	Q_1	1.5	2.9	1.4	
Grade 4	Q_3	3.4	5.1	1.7	1.5
N=159	Median	2.8	4.3	1.5	
	Q_1	2.0	3.5	1.5	
Grade 5	Q_3	4.7	6.7	2.0	1.5
N=174	Median	3.5	4.9	1.4	
	Q_1	2.7	4.1	1.4	
Grade 6	Q_3	5.3	7.1	1.8	1.5
N=162	Median	4.4	5.7	1.3	
	Q_1	3.5	4.6	1.1	

The pupils from schools originally predominantly Negro and Puerto Rican and from schools originally predominantly Other are also compared in Table 12 in terms of grade score gains in relation to the elapsed time between initial and final tests. Data are presented for grades 3, 4, 5 and 6 for all community zoned schools at Q_3, median and Q_1.

The elapsed time between the initial test and the final test was 1.5 school years. The gains made by the various pupil groups exceeded the elapsed time in almost every instance. The only exception occurred among the pupils from schools originally Negro and Puerto Rican.

In general, the gains for the pupils from schools originally predominantly Other were the greater. Outstanding gains were recorded for the Other group at the median in Grade 5, a gain of 3.2 school years in 1.5 school years elapsed time; at the upper quartile, Q_3, in grade 5 (3.2 years) and in grade 4 (3.4 years). The least progress was found for the lower quartile, Q_1, for the sixth grade pupils from schools originally predominantly Negro and Puerto Rican, where 1.1 school years gain occurred during the 1.5 school years elapsed time.

A reading of Table 12 also discloses a tendency for the group with the higher initial scores to make the greatest progress. While there are some exceptions to this tendency, as in the case of the third grade and the sixth grade pupils from schools originally predominantly Other, nevertheless it is a pronounced feature of the table as a whole. The size of the gain appears to be a function of the initial reading ability of the pupils rather than due to ethnic grouping per se.

Results in Arithmetic Achievement

Alternate forms of the Metropolitan Arithmetic Tests in computation and problem solving were administered in grades 2 through 6. The initial testing was done in November 1964, the third school month of the grade, and the final testing was done in April 1965, the seventh school month of the grade. The elapsed time between initial and final testings was 4 school months or .4 of a school year.[1]

Only the results in arithmetic problem solving in grades 3 through 6 are reported in Table 13. The results in arithmetic computation tended to parallel the findings for arithmetic problem solving.

Table 13

Comparison of Grade Norms and Median Grade Scores Obtained on the Metropolitan Arithmetic Problem Solving Tests at Initial and Final Testings in All Community Zoned Schools

		Median Grade Score Achievement	Norm at Testing	Comparison with Norm	Net Change
Grade 3 N=180	Initial Final	3.1 3.9	3.3 3.7	- .2 + .2	+ .4
Grade 4 N=429	Initial Final	4.0 5.0	4.3 4.7	- .3 + .3	+ .6
Grade 5 N=424	Initial Final	5.0 5.6	5.3 5.7	- .3 - .1	+ .2
Grade 6 N=429	Initial Final	6.6 7.3	6.3 6.7	+ .3 + .6	+ .3

A survey of the comparisons of grade scores achieved by the pupils in arithmetic problem solving with the norms at initial and final testings reveals a positive picture. At grade 4 the pupils as a group were .2 of a school year below the norm at initial test time (3.3) but at final test time they achieved a median grade score of 3.9 or .2 of a school year above norm at final test time (3.7). The net growth or change for the third grade pupils was +.4 of a school year. The net changes for the pupils in the remaining grades were also positive.

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1. Because of the heavy mandated testing involved in New York City-Wide Survey and the New York State Testing Program, it was considered undesireable to administer an additional arithmetic test to these pupils in 1965. Therefore, the April, 1965 test results were used.

Table 14 presents the comparisons of median gains in grade score achieved by the pupils with elapsed time between initial and final testings in arithmetic problem solving.

Table 14

Median Grade Score Gains for Each Grade Compared with Elapsed Time at the Median on the Metropolitan Arithmetic Problem Solving Tests for All Community Zoned Schools

	Median Grade Scores			
	11-64 Testing	4-65 Testing	Gain	Elapsed School Year
Grade 3 N=180	3.1	3.9	+ .8	.4
Grade 4 N=429	4.0	5.0	+1.0	.4
Grade 5 N=424	5.0	5.6	+ .6	.4
Grade 6 N=429	6.6	7.3	+ .7	.4

As indicated in Table 14 the third grade pupils achieved a median grade score of 3.1 in November 1964 and 3.9 in April 1965 resulting in a gain of .8 school years. The latter gain is twice the growth normally expected over the elapsed school period of .4 of a school year. The median gains for the other grades compare favorably with the expected normal growth of .4 of a school year.

A major purpose of this study was to determine the effect of community zoning upon the progress of pupils who, prior to pairing in June 1964, attended schools whose pupil enrollment was predominantly Negro and Puerto Rican or predominantly "Other". The question at issue is, "Do these pupils do as well, better or worse in the community zone situation?" The number of pupils from the schools whose pupil enrollment was predominantly "Other" varied from 119 at the third grade to 269 at the sixth grade. The number of pupils from schools whose pupil enrollment was predominantly Negro and Puerto Rican varied from 55 at the third grade level to 174 at the fourth grade level. (Table 15).

Results in arithmetic problem solving for these two groups of pupils at grades 3 through 6 are presented in Table 15. The grade scores achieved at initial and final test times are compared with the respective grade norms as of November 1964 and April 1965.

Table 15

Comparison of Grade Norms and Median Grade Scores Obtained on the Metropolitan Arithmetic Problem Solving Tests in All Community Zoned Schools for Pupils Who in June 1964 Attended Schools Predominantly Negro and Puerto Rican or Predominantly Other

		Median Grade Score Achieved	Norm at Testing	Comparison with Norm	Net Change
	Pupils from Schools Originally Predominantly Other				
Grade 3 N=119	Initial	3.3	3.3	0	+.5
	Final	4.2	3.7	+ .5	
Grade 4 N=214	Initial	4.7	4.3	+ .4	+.5
	Final	5.6	4.7	+ .9	
Grade 5 N=233	Initial	5.5	5.3	+ .2	+.6
	Final	6.5	5.7	+ .8	
Grade 6 N=269	Initial	7.2	6.3	+ .9	+.7
	Final	8.3	6.7	+1.6	
	Pupils from Schools Originally Predominantly Negro and Puerto Rican				
Grade 3 N=55	Initial	2.9	3.3	- .4	+.2
	Final	3.5	3.7	- .2	
Grade 4 N=174	Initial	3.5	4.3	- .8	+.1
	Final	4.0	4.7	- .7	
Grade 5 N=167	Initial	4.2	5.3	-1.1	+.2
	Final	4.8	5.7	- .9	
Grade 6 N=140	Initial	5.4	6.3	- .9	+.3
	Final	6.1	6.7	- .6	

According to the data in Table 15 the pupils who originally attended schools predominantly Other showed positive net changes in arithmetic problem solving ranging from +.5 of a school year at grade 3 to +.7 of a school year at grade 6 over the four month interval between initial and final testings. The comparisons between median grade score achieved and the respective norms at the two testings were practically all positive.

For the pupils from schools originally predominantly Negro and Puerto Rican an examination of similar comparisons between median grade scores achieved and the norms at testings shows negative differences ranging from -.2 to -1.1 school years from grade 3 through 6. While these differences were negative, the net changes, however, were all positive indicating that these pupils at all grades improved in relation to the norms from initial to final testings.

Table 16 presents the comparisons of median gains in grade score in arithmetic problem solving achieved by the pupils with elapsed time between initial and final testings.

Table 16

Grade Score Gains for Each Grade Compared with Elapsed Time at the Median on the Metropolitan Arithmetic Problem Solving Tests in All Community Zoned Schools for Pupils Who in June 1964 Attended Schools Predominantly Negro and Puerto Rican or Predominantly Other

		11-64 Testing	4-65 Testing	Gain	Elapsed School Year
Pupils from Schools Originally Predominantly Other					
Grade 3	Median	3.3	4.2	+ .9	.4
Grade 4	Median	4.7	5.6	+ .9	.4
Grade 5	Median	5.5	6.5	+1.0	.4
Grade 6	Median	7.2	8.3	+1.1	.4
Pupils from Schools Originally Predominantly Negro and Puerto Rican					
Grade 3	Median	2.9	3.5	+ .6	.4
Grade 4	Median	3.5	4.0	+ .5	.4
Grade 5	Median	4.2	4.8	+ .6	.4
Grade 6	Median	5.4	6.1	+ .7	.4

As indicated in Table 16 the third grade pupils who originally attended schools predominantly Other achieved a median grade score of 3.3 in November 1964 and 4.2 in April 1965 showing a gain of .9 of a school year. The latter gain is twice the growth normally expected over the elapsed school period of .4 of a school year. The gains between the initial and final testings from grades 4 through 6 ranged from .9 of a school year to 1.1 school years.

A survey of the gains for the pupils who in June 1964 attended schools predominantly Negro and Puerto Rican also shows positive gains although not as large as for the Other group of pupils. The gains between testings ranged from +.5 to +.7 of a school year as compared to a normal expected growth of .4 school years between the two testings.

Table 17

Comparison of Grade Norms and Median Grade Scores Obtained on the Metropolitan Reading Tests in All Community Zoned Schools for All Negro and Other Home or Travel Groups*

				Grade Score Achieved	Norm at Testing	Comparison with Norm	Net Change
Grade 6	Negro	Home	Initial	4.5	5.3	-.8	-.2
			Final	5.8	6.8	-1.0	
		Travel	Initial	4.3	5.3	-1.0	+.3
			Final	6.1	6.8	- .7	
	Other	Home	Initial	6.8	5.3	+1.5	+1.2
			Final	9.5	6.8	+2.7	
		Travel	Initial	7.7	5.3	+2.4	+.7
			Final	9.9	6.8	+3.1	
Grade 5	Negro	Home	Initial	3.6	4.3	-.7	+.1
			Final	5.2	5.8	-.6	
		Travel	Initial	3.4	4.3	-.9	-.1
			Final	4.8	5.8	- 1.0	
	Other	Home	Initial	5.3	4.3	+ 1.0	+ 2.0
			Final	8.8	5.8	+ 3.0	
		Travel	Initial	5.5	4.3	+ 1.2	+ 1.8
			Final	8.8	5.8	+ 3.0	
Grade 4	Negro	Home	Initial	2.9	3.3	- .4	-.3
			Final	4.1	4.8	- .7	
		Travel	Initial	2.9	3.3	- .4	-.1
			Final	4.3	4.8	- .5	
	Other	Home	Initial	3.7	3.3	+ .4	+ 1.0
			Final	6.2	4.8	+1.4	
		Travel	Initial	3.5	3.3	+ .2	+ .2
			Final	5.2	4.8	+ .4	
Grade 3	Negro	Home	Initial	1.9	2.3	- .4	+ .3
			Final	3.7	3.8	- .1	
		Travel	Initial	1.7	2.3	- .6	+ .3
			Final	3.5	3.8	- .3	
	Other	Home	Initial	2.4	2.3	+ .1	+ .7
			Final	4.6	3.8	+ .8	
		Travel	Initial	2.6	2.3	+ .3	+ .6
			Final	4.7	3.8	+ .9	

*The number of Puerto Rican pupils was too small to permit statistical analysis.

An integral feature of the community zoning plan was the reassignment of the pupils in certain grades to the other school of each pair. The children transferred from the school which they attended prior to the start of the community zoning plan, were required to travel a longer distance to the new school. An issue of the evaluation therefore becomes "Does the requirement of additional travel adversely affect achievement in reading?" This question is further analyzed for Negro and Other pupils. Puerto Rican pupils were not included in this analysis because their number was too small to permit statistical treatment.

The results are presented in Tables 17 and 18. Table 17 compares the obtained median grade score with the norm at time of testing for both the initial testing in November, 1964 and for the final testing in May, 1966. All medians for the "Negro" group are below norm. The great majority of the "Negro" group medians are below norm ranging from .5 of a school year to 1.0 school year. All medians of the "Other" group are above norm. A survey of the corresponding results for the "Other" group reveals that at the fifth and sixth grades the medians were all 1.0 school years or more above the norm. At the third and fourth grade level the "Other" group attained medians that ranged from .1 of a school year to 1.4 school years above the norm.

In terms of the net change in relationship to the norm in November, 1964 and relationship to the norm in May, 1966 the results were more favorable for the "Other" group. The net changes for this group were positive at all grade levels. For the "Negro" group four of the net changes were positive and four were negative.

The results of the "Home" versus "Travel" comparison were analyzed separately within the "Negro" and "Other subgroups. Within the "Negro" subgroup the results are not definitive; two showed a net change in favor of the "Travel" group, one showed a net change in favor of the "Home" group and one showed no difference in net change. On the other hand, within the "Other" subgroup, a net change in favor of the "Home" group appeared at all grade levels.

Table 18

Grade Scores Gains for Each Grade Compared with Elapsed Time at the Median on the Metropolitan Reading Tests in All Community Zoned Schools for All Negro and Other Home and Travel Groups*

			Median Grade 11/64 Testing	Scores Achieved 5/66 Testing	Gain	Elapsed School Year
Grade 3	Negro	Home	1.9	3.7	1.8	1.5
		Travel	1.7	3.5	1.8	
	Other	Home	2.4	4.6	2.2	1.5
		Travel	2.6	4.7	2.1	
Grade 4	Negro	Home	2.9	4.1	1.2	1.5
		Travel	2.9	4.3	1.4	
	Other	Home	3.7	6.2	2.5	1.5
		Travel	3.5	5.2	1.7	
Grade 5	Negro	Home	3.6	5.2	1.6	1.5
		Travel	3.4	4.8	1.4	
	Other	Home	5.3	8.8	3.5	1.5
		Travel	5.5	8.8	3.3	
Grade 6	Negro	Home	4.5	5.8	1.3	1.5
		Travel	4.3	6.1	1.8	
	Other	Home	6.8	9.5	2.7	1.5
		Travel	7.7	9.9	2.2	

* The number of Puerto Rican pupils was too small to permit statistical analysis.

In Table 18 the gain in median grade scores during the experimental period, November 1964 to May 1966, is compared to the elapsed time of 1.5 school years. For all but 4 of the 16 subgfoups the gains exceeded normal expectancy. The gains made by "Other" pupils are greater than those made by "Negro" pupils.

The results of the "Home" versus "Travel" comparison with respect to growth over a period of 1.5 school years were analyzed separately within the "Negro" and "Other" subgroups. Of the comparisons within the "Negro" group, two travel groups, namely at grades 3 and 6 showed gains exceeding normal expectancy; two home groups at grades 3 and 5 showed gains exceeding normal expectancy. On the other hand, within the "Other" subgroup both home and travel groups exceeded normal expectancy at all grade levels.

Summary

The predominant finding resulting from the analysis of standardized test results is that nearly all pupil groups and subgroups improved in standing in relation to national norms.

Pupils with higher achievement scores at the beginning of the experiment made greater improvement than pupils of lower initial standing. This fact was true regardless of pupil ethnic group. Nevertheless, since Negro and Puerto Rican pupils in general attained lower scores on the initial tests, as a group they showed less improvement over the experimental period than did Other pupils. This finding was demonstrated both when scores of pupil groups were compared and when individual pupil scores were analyzed. The tendency of pupils of lesser competence to improve at a slower rate is a common finding in educational and psychological research.

A separate analysis was made of the effects of pupil travel upon achievement; i.e. the reading achievement of pupils attending the original home school as contrasted with that of pupils travelling longer distances to a new school. With respect to the Negro groups the findings were inconclusive and no trend was discernible; however, with the Other group, the Home subgroups showed greater gains than the Travel groups at all grade levels.

To repeat, the main finding concerning achievement is that pupils in all schools demonstrated an improved standing in relation to national norms at the end of the experimental period. Very frequently the improvement attained exceeded the expected gains based upon national norms.

CHAPTER 4

CHANGES IN SOCIAL ATTITUDES AND BEHAVIOR

Among the objectives of the Community Zoning Program was the development of desirable social attitudes and behavior patterns, and the fostering of personal adjustment. The present chapter includes discussions of two appraisals of social acceptance across ethnic lines, and one appraisal of personal-social growth as evidenced by certain criteria.

Appraisal of Social Acceptance Across Ethnic Lines

The essential purpose of this study was to determine, through the use of observation, whether the Community Zoning Program results in real integration having psychological and social consequences, or in mere desegregation. The observation technique was employed because it became evident that much classroom interaction was beyond the range of quantification and too subtle for measurement on a rating scale. In order to determine whether integration occurred, observations of pupils were made in the eight fully Community Zoned schools and in two partially paired elementary schools. Five classes were visited in each school for a total of fifty observations and each observation lasted for one hour. The fifty classes in which observations were to be made were distributed proportionately to the grade distribution of the 202 classes involved in the program, as follows:

Grade 1 - 8 classes
Grade 2 - 10 classes
Grade 3 - 8 classes
Grade 4 - 8 classes
Grade 5 - 9 classes
Grade 6 - 7 classes

Within each school the classes per grade were selected at random. To insure the randomness of the sample, principals were requested not to change the original schedule of observations.

All the observations took place during March and April of 1966, when the program had been in progress nearly two years. All were made by the same qualified observer, whose only material was a mimeographed checklist used as a guide rather than as a measuring instrument.

The findings of this study showed that, in terms of behaviors that an outside trained observer may see in a classroom, there was no evidence of functional awareness of ethnic differences on the part of teachers or children. This finding is arrived at on the basis of the following observations:

a. When children chose partners or teams, they discriminated solely in terms of sex. Boys chose boys and girls chose girls.

b. In the lower grades where children frequently line up and hold hands for games, there was no evidence of reluctance to do so between children of different ethnic background.

c. Teachers chose monitors ready at that moment without regard to ethnic background.

d. When there was disorder in a classroom, it was just as likely to involve a member of one ethnic group as another.

e. Teachers related to children in a friendly or hostile manner according to the merits of the situations and without ethnic bias.

f. Clothing and grooming provided no basis on which to differentiate among ethnic groups. With few exceptions, there was an "average" appearance among all children regardless of ethnicity.

In general, it may be concluded that within the classes of the Community Zoned Schools there exists evidence of desirable psychological and social relationships among the pupils and not merely a physical commingling of diverse ethnic groups.

Sociometric Choices of Pupils

A second study had as its objective the assessment of social relationships among the zoned-school children of the upper grades. It was a sociometric test, administered in the first year of the program to children of the fourth, fifth, and sixth grades, and in the second year to only the fourth and fifth graders. In such a study, the children indicate on sociometric choice cards their preferences among fellow pupils. The children in this particular test were asked to note their first, second, and third choices of classmates with whom to work on a social studies committee. The test was administered in February and May of 1964 and in December,1965, and April, 1966.

In order to relate preferences to ethnic factors, the ethnic designation was noted for all children, whether choosing or chosen. The two administrations of the instrument in each year made it possible to determine any changes in the proportion of Negro, Puerto Rican, and Other children choosing members of their own or another ethnic group. During the 1964-1965 school year the sociometric cards were filled out by all children in the fourth, fifth, and sixth grades of the Community Zoned schools. Cards were filled out by a total of 914 pupils of whom 296 (32 per cent) were Negro, 65 (7 per cent) were Puerto Rican and 553 (61 per cent) were Other. During the 1965-1966 school year, a total of 846 children in the fourth and fifth grades of the zoned schools participated in the study. Of this total 339 (40 per cent) were Negro, 74 (9 per cent) were Puerto Rican and 433 (51 per cent) were Other.

The underlying assumption of the analysis is that, if ethnic group membership was not a factor in sociometric choice, then theoretically, each of the three ethnic groups should register choices generally in the same proportions as children are found in the eight schools, i.e. 61 per cent Other, 32 per cent Negro and 7 per cent Puerto Rican. Conversely, if children tend to prefer their own ethnic group, choices will tend to concentrate in that group, and depart from the above three proportions. These data may also be studied from another point of view: what was the trend of pupil choices over a period of time? Did pupils choose classmates of another race more or less often in the spring term than in the winter term during each of the school years under study.

For each school year studied, data were obtained and analyzed on the first, second, and third choices made by each ethnic group. The proportions of each ethnic group chosen as first, second, or third choices was compared with the actual ethnic distribution of the pupil population in the grades studied in the Community Zoned Schools.

The distribution of choices by ethnic group was much the same for first, second, and third choices. Therefore, data for first choices only are presented in Table 19,below. This table presents also the per cents each group would have chosen if ethnic factors had not operated in the choice-making process.

Table 19

Percentage of Negro, Puerto Rican, and Other Children Chosen as First Choices Compared With Actual Pupil Ethnic Distribution, Community Zoned Schools School Year 1964-1965 and 1965-1966

	1964-1965						1965-1966					
	Feb. 1965			May 1965			Dec. 1965			April 1966		
	Chosen			Chosen			Chosen			Chosen		
Chooser	% N	% PR	% O	% N	% PR	% O	% N	% PR	% O	% N	% PR	% O
Negro	63	6	31	55	6	39	64	5	31	57	6	37
Puerto Rican	40	31	29	34	23	43	42	27	31	34	40	26
Other	14	2	84	13	3	84	22	3	75	20	4	76
Actual Pupil Ethnic Distribution	32	7	61	32	7	61	40	9	51	40	9	51

Data analyzed for the 1964-1965 school year show that in February, 1965, the first time pupils were asked to make choices, Negro pupils, who comprised 32 per cent of the study population, selected Negroes as their first choice 63 per cent of the time, while they selected Other pupils, who comprised 61 per cent of the population, only 39 per cent of the time. By May, 1965, however, when pupils were asked to make choices for the second time, the proportion of Negro pupils choosing Negro pupils had declined by 8 per cent while the proportion of Negroes choosing Other pupils increased by 8 per cent, a step in the direction of integration.

The Other children selected their own ethnic group 84 per cent of the time in both February and May 1965, despite the fact that they made up only 61 per cent of the study population. For Puerto Rican pupils, the choices were closer to theoretical expectations in May than they had been in February. On the basis of the findings, it may be concluded that there has been somewhat more resistance to free choice integration among Other children than among Negro and Puerto Rican children in Community Zoned Schools.

The findings on pupil choices for the 1965-1966 school year did not differ markedly from those obtained during the first year of the study. Table shows that in December, 1965, Negroes who comprised 40 per cent of the study population selected Negroes as their first choice 64 per cent of the time. They selected Other pupils, who comprised 51 per cent of the population only 31 per cent of the time. The data on choices collected in April 1966 showed that the distribution of choices of the Negro pupils had changed. At this time, the proportion of Negroes choosing Negroes had declined by 7 percentage points and the proportion choosing Others had increased by 6 percentage points. In contrast, the Other children had not altered their choice patterns. Those selecting their own ethnic group comprised 75 per cent in December, 1965, and 76 per cent in April, 1966, despite the fact that they made up only 51 per cent of the study population.

The Puerto Rican pupils showed the greatest change from the previous year. During the 1964-1965 school year, they moved closer to the actual proportions of the study population at the end of the year. The data for the 1965-1966 school year show that they moved further away from the actual proportions in April, 1966 than in December, 1965.

It may be concluded from these data for both school years that the choices of the Other pupils did not change at all, while those of the Negro pupils changed very slightly. The Puerto Rican pupils are found, in the second year, to move away from the chance proportions in making choices, reversing the trend towards selecting pupils from the other ethnic groups, noted during the first year.

It should be noted that, on none of the occasions on which choices were made, two during 1964-1965 and two during 1965-1966, was there any evidence of large scale physical aversion on an ethnic basis. On each occasion substantial proportions of the pupils expressed a preference for working with a classmate of another ethnic group.

A Study of Personal-Social Growth

A third study was intended to find **evidence** of personal-social growth by means of teachers' ratings of pupils with **respect** to certain items of behavior. The actions observed were regarded as evidence of the quality of the child's relationships with his classmates and as indications of his adjustment to the customs making up satisfactory conduct in school. The teachers' reports were interpreted as possibly indicative of the effects of the program on children's development.

The instrument used was the Personal and Social Growth Scale. Ratings were made in May of each year. Each child who had been in a teacher's class from the beginning of the school year until the time of rating was rated twice: once for current behavior and once for what the teacher remembered his behavior to have been in the fall preceding. In the first year of the program, approximately 2,600 children of grades 2 through 6 were rated. In the second year, the number rated was 1,132, comprising children of grades 2 and 6 only. The items on the scale were as follows:

How Often Does This Child . . . .

1. Talk out of turn or interrupt you?
2. Help a classmate to do school work?
3. Use obscene language?
4. Get excited or enthusiastic about school work?
5. Get into a fight with another pupil?
6. Work up to potential?
7. Show lack of respect for other pupils' property?
8. Willingly take part in a class activity?
9. Play only with members of his own ethnic group?
10. Express gratitude to the teacher when helped?

The teacher was asked to indicate how often the specific behavior occurred. The steps of the scale were: every day, a few times a week, about once a week, rarely, never.

The study specifically sought to determine the personal-social status of Negro, Puerto Rican and Other children in the Community Zoned schools at the beginning of the 1964-1965 and 1965-1966 school years: the status of the same pupils at the end of the year; and the changes, if any, discernible between the two administrations of the scale.

Table 20

Per Cent of Pupils in Grades 2 and 6 Receiving Satisfactory Ratings on Ten Items on Personal and Social Scale, Community Zoned Schools, Fall 1965 and Spring 1966, by Ethnic Group

	N			PR			O		
Item	Fall	Spring	Dif.	Fall	Spring	Dif.	Fall	Spring	Dif.
Grade 2									
Help a Classmate	26	34	+8	26	26	0	44	52	+8
Enthusiasm	56	58	+2	56	42	-14	82	77	-5
Work to Potential	55	63	+8	44	51	+7	76	82	+6
Willingness	76	77	+1	81	72	-9	92	93	+1
Express Gratitude	51	50	-1	37	47	+10	67	66	-1
Play Only With Members of Own Ethnic Group	80	77	-3	81	93	+12	81	84	+3
Lack of Respect	89	91	+2	95	86	-9	95	96	+1
Get Into Fights	81	79	-2	98	74	-24	94	91	-3
Obscene Language	97	97	0	100	98	-2	99	98	-1
Talk out of turn	64	65	+1	65	63	-2	76	78	+2
Grade 6									
Help a Classmate	30	30	0	41	24	-17	40	43	+3
Enthusiasm	52	51	-1	51	61	+10	70	65	-5
Work to Potential	52	53	+1	63	57	-6	76	78	+2
Willingness	73	67	-6	76	82	+6	86	84	-2
Express Gratitude	31	42	+11	37	47	+10	37	38	+1
Play Only With Members of Own Ethnic Group	50	58	+8	53	61	+8	68	78	+10
Lack of Respect	95	95	0	94	98	+4	99	98	-1
Get Into Fights	89	88	-1	94	96	+2	97	95	-2
Obscene Language	96	96	0	94	98	+4	100	99	-1
Talk out of turn	59	58	-1	69	73	+4	76	70	-6

The five categories of responses were grouped into the broad categories Satisfactory and Unsatisfactory. On the negative items (talks out of turn, uses obscene language, gets into fights, shows lack of respect, plays only with members of his own ethnic group), a rating of "about once a week," "rarely," and, "never" was considered satisfactory. On the positive items (helps a classmate, gets enthusiastic about school work, works up to potential, willingly takes part in class activities, expresses gratitude when helped) "every day" and "a few times a week" were considered satisfactory.

The data for the 1964-1965 school year showed that pupils showing lower personal-social status early in the year tended to have improved by the end of the year, while those showing higher personal-social adjustment on the first rating tended to remain where they were originally.

Table 20, on the preceding page, presents data on the per cent of pupils in grades 2 and 6 who received satisfactory ratings on the ten items of the personal-social scale administered in the fall of 1965 and the spring of 1966. Analysis of the original personal-social status and changes in status for second grade Negro, Puerto Rican, and Other pupils with regard to the five negative scale items showed that, generally, a high proportion of pupils from each of the three ethnic groups were rated satisfactory on the negative items in the fall and spring terms. For each of the ethnic groups, the proportion of pupils rated satisfactory on each negative item generally exceeded 80 per cent. It should be noted that, except for two instances involving Puerto Rican pupils, the per cent changes between fall and spring regarding the negative items were generally quite small. Changes involving Puerto Rican pupils will generally tend to be more dramatic because of the considerably smaller size of this population in the overall sample. (The smaller the size of the sample, the lower the reliability of data, as a rule.)

Analysis of the teacher ratings for second grade pupils on the five positive items showed interesting variations. None of the three ethnic groups showed up very well in helping other classmates, though considerably higher proportions of Other pupils were rated satisfactory in both terms than either Negro or Puerto Rican. In rating enthusiasm and working to potential, the teachers rated considerably higher proportions of Other pupils satisfactory than Negro or Puerto Rican pupils. Approximately 80 per cent of the Other pupils were so rated at each administration of the scale. Pupils from each ethnic group were generally rated very satisfactory on willingness to take part in class activities.

The data on personal-social status for the sixth grade pupils also presented in Table 20 are very similar to those analyzed for the second graders. With respect to such negative items as lack of respect, gets into fights, and uses obscene language, extremely high proportion of Negro, Puerto Rican, and Other pupils were rated satisfactory, in both the fall and spring. As the term progressed the data show that approximately 8 per cent more of the Negro, Puerto Rican and Other sixth grade pupils were rated satisfactory on the negative item, "plays only with members of own ethnic group," indicating more and more evidence of play among the ethnic groups rather than within one group.

Analysis of the data on ratings of sixth grade pupils on the five positive items provides some interesting findings. Generally, considerably lower proportions of Negro, Puerto Rican and Other pupils were rated satisfactory on such positive items as "helps a classmate" and "expresses gratitude" and the differences in percentages between the fall and spring for each of the three ethnic groups were small. Considerably higher proportions of Other pupils than Negroes or Puerto Ricans continue to be rated satisfactory on "enthusiasm" and "works to potential," but the gap has been narrowed.

It may be concluded from these data that second and sixth grade pupils from each of the three ethnic groups in the Community Zoned schools showed a high degree of personal-social adjustment in both the fall and spring when rated by their teachers on such negative scale items as "Shows lack of respect," "Gets into fights," "Uses obscene language and Talks out of turn." Second grade pupils in each of the three ethnic groups tended to play more with pupils outside their own ethnic group than did sixth grade pupils. This was true in the spring as well as the fall. When rated on the positive items, second and sixth grade Negro, Puerto Rican, and Other pupils were generally found wanting in helping other classmates and expressing gratitude. Differences in the level of personal-social status between the ethnic groups were evident only when the pupils were rated on the positive items, "Shows enthusiasm," and "Works to potential." Here, considerably higher proportions of Other pupils were rated satisfactory than were Negroes or Puerto Ricans. Generally, any changes in the per cents between the fall and spring administrations of the scale were small.

Summary

Findings from the studies of social attitudes and behavior, taken together, present a picture that is not entirely consistent. Different methods of appraisal yielded findings that did not always agree. While a trained observer found that neither children nor teachers discriminated against children of any ethnic group, sociometric choices indicated that Other and Negro but not Puerto Rican children generally tended to choose classmates of their own ethnic group as partners on a social studies committee. Perhaps one reason the Puerto Rican pupils chose fewer of their own group was that the total number of Puerto Rican children was very small, and hence there were fewer in each classroom from whom to choose.

The Other children were the group choosing its own members most consistently. This tendency was slightly less marked in the second year of the program but it did not decrease during the year either in 1964-65 or in 1965-66. Nevertheless, about one fourth of the children chose members of other groups in the second year of the study. The Negroes broadened their choices during the course of each year. The Puerto Ricans did likewise during the first year but not during the second. They generally chose Negroes more frequently than members of their own group. One can only infer what these data mean, and to what extent, in as small a "universe" as a classroom, personality factors may have outweighed ethnic ones. However, taking the data together, it is inferred that the time and the situations involved in the experiment were not of sufficient length to reach definite conclusions regarding the growth of interpersonal relationships among members of the three ethnic groups.

The changes in behavior reported on the teachers' rating scales tend to be slight over the period from fall to spring. In general, the behavior ratings suggest a favorable climate of behavior in the Community Zoned classrooms.

CHAPTER 5

TEACHERS' REACTIONS TO THE COMMUNITY ZONING PLAN

Because the success or failure of any educational program is, to a high degree, attributable to the performance and attitude of the teachers conducting it, an evaluation of the Community Zoning Program had to include an appraisal of the reactions of the teachers involved. The method of appraisal decided upon included two parts: a study of teachers' opinions as to the value of the program itself, and an inquiry into their feelings as to the difficulties they had met in implementing the program. Description of the two aspects of the appraisal and of the resulting data are presented in the following sections of the present chapter.

Teacher Attitudes Toward The Plan

An instrument designed to discover teachers' reactions to the program was sent to all teachers of grades 2 through 6 in April, 1965, and again in April, 1966. The intention was not only to determine attitudes at each time, but to find what changes of attitude, if any, had occurred over the interval of a year.

The instrument used was a Teacher Reaction Sheet. A total of 140 teachers received the Reaction Sheet in April, 1965, of whom 99 or 71 per cent responded. In April, 1966, a total of 169 teachers received the Reaction Sheet, of whom 124 or 73 per cent responded. It is interesting to note that almost identical percentages responded in both years and generally the same teachers responded to both administrations of the questionnaire. Nearly all of the teachers responding were white. The Teacher Reaction Sheet consisted of ten statements designed to obtain information regarding teacher attitudes toward the plan and the teachers were directed to respond to each by circling one of the following five choices: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD).

The data obtained from both inquiries are presented in Table 21, page 51 in terms of per cents of teachers giving each response. The findings from the first year's data indicate that the teachers had mixed feelings toward the program. While optimistic that the program was furthering certain personal social developments, they tended to be dubious about instructional results. Thus although more than half the teachers responding expressed the belief that the program resulted in increased understanding and good will among children of varied ethnic backgrounds, and also in respect for the rights of others regardless of race, creed, or economic standing, about the same proportion expressed disagreement with the idea that the program promoted an optimum total learning situation for all pupils. About half the respondents agreed that the money spent on the program would be better spent in reducing class size within each neighborhood school, and somewhat fewer expressed disapproval of additional travel for children in the interests of integration. While more than 40 per cent agreed that the program should not be expanded to include more pairs of schools, less than 30 per cent felt that the program should be discontinued. Nearly half were of the opinion that the long-range effects of the program would be highly beneficial despite any short-range ill effects, and no more than 11 per cent felt that the program hindered education for leadership. Only about one fourth of the respondents expressed doubt that the program would "spill over" into the community and make for better understanding among adults of varied ethnic groups.

Analysis of the April, 1966 data provides both similarities and differences when compared with the data of the previous April. The preponderance of the teachers continued to agree that the program increased understanding among all children and developed respect for the rights of others; but the proportion agreeing dropped slightly. With respect to the statement that effects of the school program "spilled over" into the community to promote better understanding among adults, the teachers were less optimistic than they had been the year before, with only slightly more expressing agreement than expressed disagreement. At this time, 66 per cent of the respondents, ten percentage points above the figures for the previous year, expressed doubt that the program provided the optimum learning situation for all children. The proportion agreeing that the money might better be applied to reducing class size in the neighborhood school had increased by 11 percentage points. A considerably smaller proportion than previously expressed confidence in the long-range effects of the program. Fewer teachers favored expanding the program; negative opinions were about twice as frequent as positive ones. The proportion disapproving of extra travel for children had increased. A majority of the teachers still expressed the opinion that education for leadership was not hindered by the program.

It appears to be clear that, during both years of the program, many teachers were inconsistent in their reactions to the program. While believing in certain personal-social benefits of the plan, a majority tended to oppose the expansion of the program into more schools and approximately one in three favored its discontinuance.

Teacher Problems Resulting From the Program

The purpose of this aspect of the study was to determine what the teachers considered some of the major problems besetting them as a result of the experimental Community Zoning Program. In order to obtain such data, a Teacher Problem Sheet was sent to the teachers towards the end of the first year of the program. This unstructured instrument asked teachers to record problems which they had experienced in the following twelve areas: materials and physical facilities, instructional procedures, classroom social relationships, discipline, dealing with parents, health and physical appearance of pupils, routines, community pressures, curriculum, absence and lateness, O.T.P.'s and other auxiliary personnel, and Others. The instrument sent to the teachers during the second year of the program differed from the original one. The second Teacher Problem Sheet consisted of nineteen possible problems a teacher might encounter and asked them to rate each as a major problem, a minor problem, or no problem. The nineteen problems included on the sheet were obtained from the original unstructured responses provided by the teachers during the first year of the study.

Towards the end of the first year, the Teacher Problem Sheet was sent to 140 teachers, of whom 99 (71 per cent) responded; during the second year, the revised one was sent to 169 teachers, of whom 124 (73 per cent) responded.

Analysis of the responses obtained during the first year showed that many teachers reported that they had encountered no problems as a result of the program, and that the majority of respondents indicated only a few problems, all such as could be coped with by the applicationof their own resources. Some of the more frequently cited problems were inadequate facilities, insufficient supplies, problems resulting from heterogeneous ability groupings of pupils, and discipline.

The responses received in the second year of the program did not differ markedly from those obtained from the initial inquiry. The following, in order of frequency of response, are the five major problems indicated by the teachers on the revised Problem Sheet:

1. Troublesome children contaminated the well behaved. (57 per cent)
2. Ability range in the class is too wide. (48 per cent)
3. School discipline is too permissive. (47 per cent)
4. Textbooks do not reflect ethnic pluralism. (43 per cent)
5. Pupil lunchroom facilities are inadequate. (33 per cent)

Two of the five most frequently mentioned major problems (Numbers 1 and 3) were in the area of discipline, a problem area certainly not confined only to the Community Zoned schools.

Table 21

Teacher Reactions to the Community-Zoning Program as of April, 1965 and April, 1966

Per Cent of Teachers Giving Each Response (April), 1965						Per Cent of Teachers Giving Each Response (April), 1966				
SA	A	U	D	SD		SA	A	U	D	SD
17	42	19	20	1	1. The Community-Zoning Program results in increased understanding and good will among children of varied ethnic backgrounds	17	37	23	16	7
19	26	17	30	7	2. Children of varied ethnic groups should not be brought together in school if it necessitates busing or longer-than-usual walking distances	26	33	11	20	10
4	23	16	30	26	3. The Community-Zoning Program promotes an optimum total learning situation for all pupils	1	14	19	38	28
5	6	10	56	22	4. The Community-Zoning Program hinders pupil education for leadership.	6	4	24	47	19
15	31	29	15	9	5. The long-range effects of the Community-Zoning Program will be highly beneficial, despite any short-range ill effects	8	27	38	15	12
27	24	14	23	11	6. The money spent on the Community-Zoning Program would be better spent on reducing class size within each neighborhood school	43	19	19	14	5
18	37	19	19	6	7. The Community-Zoning Program develops respect for the rights of others regardless of race, creed, or economic standing.	15	34	23	22	6
22	21	26	20	10	8. The Community-Zoning Program should not be expanded to include more pairs of schools	29	23	23	18	7
12	31	30	16	10	9. The effects of the Community-Zoning Program probably "spill over" into the community and make for better understanding among adults of varied ethnic groups	10	27	30	23	10
17	12	28	28	14	10. The Community-Zoning Program should be discontinued	19	17	30	21	13

SA = Strongly Agree: A = Agree: U = Undecided: D = Disagree: SD = Strongly Disagre

To summarize, the data for the two school years under study show that teacher problems in the eight schools resulting from the Community Zoning Program did not change appreciably from one year to the next and that two major problems cited both years were pupil discipline and difficulties encountered in teaching pupils in classes with a wide range of abilities, problems typical of scores of elementary schools where no experimental programs have been instituted.

A comparison may be made of the tone of the responses of teachers on the Teachers' Reaction Sheet with that of their responses on the Problem Sheet. Positive responses outnumbered responses on the former in the first application (by 6 to 4), but were equally divided in the second. Yet the teachers seem to have felt competent to cope with the problems posed by the experimental program, or at worst not generally over-concerned about these problems. They appear more concerned about the longer range effects of the program.

CHAPTER 6

CURRICULUM PRACTICES AND MATERIALS

The scope of this evaluation includes a description of the curriculum content and its implementation in the Community Zoned Schools in the 1964-1965 and 1965-1966 school years. Curriculum may be said to include everything that happens to a child during the time he is in school. For the purpose of this study, however, curriculum has been defined as those activities that are related to explicitedly stated objectives. Thus the New York City curriculum, as described in the curriculum bulletins, was the focal point of the evaluation.

The procedures selected for gathering information were the interview and the questionnaire administered to principals and teachers in the zoned schools. During both the 1964-1965 and the 1965-1966 school years, each principal was interviewed with regard to general aspects of the curriculum in his school and the relationship between his school and the paired school. Specifically, the principals were asked to describe the kind of communication they maintained with the paired school, the personnel involved, its frequency and its objectives. No attempt was made to quantify the obtained information. Instead, each pair of principal interviews was separately analyzed. A total of seven principals from the eight schools were interviewed, since P7 and 8 Brooklyn, having the same principal, are considered one administrative unit.

In each year of the study, questionnaires were administered to two randomly selected teachers from each grade, except pre-kindergarten, in the eight schools. The total number of teachers receiving questionnaires was 62. The questionnaire administered in the second year was modified from the previous year. Teachers were interviewed only during the 1964-1965 school year. It is interesting to note here that of the 62 teachers interviewed or receiving questionnaires in both 1964-1965 and 1965-1966 the number of regularly appointed teachers remained almost identical, the total being 49 regular teachers in 1964-65 and 50 regular teachers in 1965-66.

Results of Interviews with Principals

There was a wide range of approaches to curriculum implementation and adaptation in the various schools. According to the principals, the following curriculum-related changes occurred in the schools in 1964-1965, as a consequence of pairing:

- Socio-economic heterogeneity within classes
- Smaller pupil-teacher ratios
- Specialized teaching techniques by OTPs
    - a. Corrective reading
    - b. Library science
- Greater emphasis on Negro history in social studies
- Integrated school clubs and teams; i.e., baseball

Emphasis on brotherhood in all areas of the curriculum
Inter-visitation of teachers within schools
Other changes in social studies curriculum
Human relations workshops for teachers
General usefulness of OTPs in implementing the curriculum

In addition to the above items, the principals frequently mentioned in 1965-66 programs designed to raise achievement in the language arts. Some of the principals mentioned securing integrated books and textbooks. As reported during the first year, almost all of the principals again noted that the added OTP positions were the most significant factor in the effective operation of their schools. The introduction of the OTPs in the eight schools has accelerated the already existing trend towards using subject area specialists in the elementary schools. In the Community Zoned schools they have been used primarily to create subject area specialists in reading, science, art, and, occasionally, music and library. Everyone of these schools uses, at least, one, and in some cases two OTPs as some kind of reading specialist.

With regard to communication between specific pairs of schools, the principals reported in 1964-1965 that there appeared to be a minimum of communication and articulation between any of the pairs of schools, and that this was particularly true in the area of curriculum. By the next year this situation had changed little. Where some communication did take place, it occurred mainly between principals and between guidance counselors, and it concerned administrative articulation and/or individual problem pupils.

The principals were concerned about possible fragmentation of the curriculum by having the first two or three grades in one school and the upper grades in another. They mentioned also that, although there was considerable adaptation of the curriculum within individual schools as well as a search for new ways of implementing the existing curriculum, communication between schools in this regard was at a minimum.

Utilization of Teacher Time

During both years of the study, the teachers in the sample were asked to indicate the proportion of their working day spent in carrying out their duties in each of the following five areas: instructional activities, instruction-related activities (i.e. planning for trips,) administrative activities, control activities (i.e. discipline, guidance), and other activities (i.e. banking, collection of milk money). The findings obtained from the teacher responses in the 1964-1965 school year showed that the proportion of time spent by different teachers in the paired schools on instructional activities ranged very widely. If 80 per cent is accepted as a reasonable expectation of the amount of time a teacher should generally spend on instruction, then only 29.3 per cent of the teachers responding approached or exceeded this criterion. This may be explained, in part, by the fact that a large part of pupil instruction was supplied by the OTP specialists.

The discrepancy between the time teachers spend in instruction and the amount of time pupils receive instruction can be explained by the way in which the OTPs were used. All of the paired schools received additional teaching positions to be used by the principal according to the needs of his school. With minor exceptions, the OTP's in the schools of this study were used to create subject area specialists. The way these OTP subject area specialists functioned, according to classroom teachers, was to carry out initial teaching in a specific subject area. More than 85 per cent of the OTPs spent all of their time working with pupils. Only 10 per cent of them spent as much as one fourth of their time working with teachers.

It may be inferred from the data that, as a result of the way in which the added OTPs are used in these schools, greater specialization in teaching is occurring. While classroom teachers are still responsible for primary instruction in mathematics and social studies, specialists are becoming responsible for primary instruction in many of the other curriculum areas.

In response to questions regarding the amount of time OTP's spent instructing their classes, the teachers reported that it averaged approximately two and a half hours per week, or 10 per cent of the school week. This figure remained the same during both years of the study. The data further showed that the median amount of time that the classes received face-to-face instruction from regular classroom teachers and OTP's during the 1965-1966 school year was approximately 70 per cent. This was a decline of 7 per cent from the median rate of 77 per cent obtained for the previous school year. The downward trend in the proportion of time teachers spent on instruction was accompanied by an increase in the time teachers spent on control activities. Thus, while in 1964-1965 only three of 58 teachers reported spending more than 20 per cent of their time on control activities, in 1965-1966 eleven of 62 teachers reported spending that much time.

Only extremely small changes from year to year were reported with respect to the remaining three categories of teacher activity: instruction-related, administrative and other.

Teacher Use of Curriculum Materials

In both years of the study, teachers were asked to rank in order of use three sources of curriculum materials. These sources included commercially prepared materials, Board of Education materials, and self-prepared materials. The teachers were instructed to rank these sources by using the number one to indicate most use, the number 2 to indicate some use, and the number three to indicate least use. If neither of the three sources of materials was used in a curriculum area, the teachers were instructed to enter zero. The curriculum areas included were art, music, mathematics, social studies, language arts, health education and science.

Analysis of the data for the 1964-1965 school year showed that teachers relied mostly on Board of Education and self-prepared materials. In that year 52 per cent of them indicated that they relied mostly on Board of Education materials, while 41 per cent of them indicated self-prepared materials. Only 5 per cent of the teachers reported that they relied most on commercially prepared materials. In 1965-1966 there was a considerable shift to self-prepared materials. The corresponding percentages for that year were: Board of Education materials, 32 per cent; self-prepared materials, 58 per cent; and commercial materials, 10 per cent. The teachers

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also reported that in 1964-1965, in each of the seven curriculum areas, they relied almost entirely on Board of Education and self-prepared materials. In 1965-1966 these preferences continued except in the area of music which was now ranked almost equally for each of the three materials' sources. The decline in the use of Board of Education materials and the increased use of commercially prepared materials may be attributed, in part, to an increase in the funds available to the paired schools and the growing number and diversity of commercial sources presenting integrated materials. In the language arts and social studies, teachers continued to use more self-prepared materials in 1965-1966. Further comparison between the two school years showed that in 1964-1965, teachers used more Board of Education materials in art, music, health education, and science, while in 1965-66 they used more self-prepared materials in art and science.

The data also showed that in 1965-1966 there was a fairly large decline in the teacher use of Board of Education curriculum bulletins as a primary source. Thus the trend toward the use of self-prepared and commercial materials as primary sources would appear to support the view that teachers in the Community Zoned schools are seeking more diversified and individualized materials. In citing the reason for decreased use of curriculum bulletins, approximately 7 per cent of the teachers reported non-availability while a much higher proportion of the teachers, 26.6 per cent, reported them as not appropriate to the grade.

Teacher Evaluation of Curriculum Bulletins

The teachers were asked to evaluate each listed bulletin they used according to the adequacy of statements of objectives, suggested methods of instruction, and descriptions of the materials needed for instruction. Approximately 30 bulletins were listed each year for evaluation.

The findings showed that in both years, 95 per cent of the teachers felt that the objectives as they appeared in the bulletins were adequately stated. Despite a decline of 9 per cent from the previous year, the large majority of teachers continued to rate the bulletins as satisfactory in their description of methods of instruction and materials.

Curriculum Provisions for Affecting the Self-Image of Disadvantaged Children

In both years of the study teachers reported on the curriculum with respect to disadvantaged children. A total of 62 teachers responded in each year. In defining self-image, teacher emphasis was placed upon changes in level of aspiration and the teachers described those activities affecting pupil self-image. In 1964-1965 it was clear that teacher selected or created materials and situations outweighed the other approaches. About one-third of the teachers relied on their own resources, which included such techniques as taking trips encouraging fair play and friendliness, establishing art programs, and expanding choices of library books.

Forty-seven per cent of the teachers mentioned either reading or teacher-made situations. Twenty-four per cent reported either that they had no disadvantaged children or that they made no special effort. Many teachers reported that only a few of the children in their classes were really disadvantaged.

A few teachers believed that using the theme of famous persons would be helpful, but it appears that the "great man" idea is not an important part of teachers' perceptions of the ways in which curriculum may be applied to improving self-image. Negroes famous in history were mentioned about 10 per cent of the time as being important for improving the self-image of Negro children. Teachers attached minimal importance to Negro History Week and Brotherhood Week. Teachers consistently stressed the significance of learning to read as a method of raising children's sights.

The general impression of the responses to the question on self-image was that the teachers prefer materials that are intrinsically a part of the curriculum which they see as resulting in pupil learning. For teachers, self-image is a function of achievement, not of knowing great men or of racial consciousness.

Data obtained for the 1965-1966 school year on curriculum adaptation affecting pupil self-image did not differ markedly from those obtained for the previous year. The teachers again were asked to describe provisions made in the curriculum for affecting the self-image of the disadvantaged child and fifty of the sixty-two teachers responded. Twelve teachers reported that they had no disadvantaged children. Approximately, 53 per cent of the teachers responding indicated special attention to the individual child, while 47 per cent indicated whole class activities. Both approaches had the same purposes: to enable and encourage children to achieve academically, accept class responsibilities, and to work together with a feeling of equality and mutual respect.

It is interesting to note that the heaviest emphasis was given to what may be termed "adjustment" or "mental hygiene", while academic motivation, and integration combined with ethnic studies were given only moderate mention by teachers. Analysis of the responses indicates real concern for the disadvantaged child. It is interesting that only two teachers mentioned the use of Board of Education bulletins which emphasize ethnic contributions as helpful in their adapted curriculum for the disadvantaged.

Summary

The results of interviews and questionnaires administered to principals and teachers in the eight Community Zoned schools in both the 1964-1965 and 1965-1966 school years requesting information on curriculum adaptation, utilization of teacher time in the classroom, teacher use of curriculum materials, teacher evaluation of curriculum bulletins, and the curriculum as related to the self-image of disadvantaged children are summarized as follows:

1. In both years of the study, the principals reported a wide range of approaches to curriculum implementation and adaptation. This included greater emphasis on Negro history in the social studies and emphasis on brotherhood in all areas of the curriculum. In the second year there was particular emphasis on language arts achievement.

2. The principals reported that the increased use of OTPs accelerated the already existing trend towards using subject area specialists in the elementary schools.

3. Principals generally described communication between pairs of schools regarding curriculum materials and curriculum adaptation as being at a minimum.

4. Teachers reported that in both years the time spent by OTPs in instructing the pupils generally averaged two and a half hours per week, or approximately 10 per cent of the school week, and that the proportion of time teachers and OTPs spent in direct pupil instruction, control activities, instruction-related activities, administrative and other activities was about the same in both years.

5. Analysis of the teacher responses indicated that in the 1965-1966 school year, the second year of the study, teachers moved more in the direction of using self-prepared curricular materials rather than Board of Education materials. The use of commercially prepared materials also increased in the second year and may be attributed, in part, to an increase in funds available to the schools for purchase of such materials. In general, there was a trend among the teachers towards seeking more diversified and more individualized materials.

6. In evaluating the Board of Education prepared curriculum bulletins according to the adequacy of their stated objectives, suggested methods of instruction, and description of instructional materials, the teachers generally agreed, in both years of the study, that the objectives were satisfactorily stated and that the bulletins were satisfactory also in their description of methods of instruction and materials, although in the second year of the program about one-fourth of the teachers found the materials inappropriate to the grade.

7. In attempting to raise the self-image of disadvantaged children in their classes, the teachers generally aimed at encouraging children to work together with a feeling of equality and mutual respect, achieve academically, and accept responsibilities in the classroom.

CHAPTER 7

SUMMARY OF FINDINGS

This chapter summarizes the findings of the evaluations of various aspects of the Community Zoning Program and includes studies of reactions of school administrators and teachers in the program to the experiment; observed changes in pupil's social attitudes and behavior; selected statistics concerning the program such as average class size, unit costs per pupil, ethnic composition of pupil register, pupil mobility, etc.; the nature and application of the curriculum in these schools, and pupil functioning as observed from achievement test results.

Interviews with administrators

Interviews were held with school administrators in the first and second years of Community Zoning. During interviews with three assistant superintendents and nine principals involved in the Community Zoning experimental program and held during the first year of the experiment in January, 1965, the following major problems were cited in their responses:

a. The time interval between the final decision to proceed with the program and the actual start was too brief to develop adequate organizational and administrative procedures.

b. The increase of busing created problems.

c. The movement of books and materials from building to building and within buildings was difficult.

d. Parent and community group opposition to the program interfered with the initial operation of it in many of the schools.

e. Lunchroom facilities were inadequate.

f. The bimodal nature of academic achievement made it difficult to teach children with such a wide range of ability in the same class.

When interviewed again in May, 1965, the district superintendents indicated that they had been able to solve, to some degree, most of the original problems. However, during interviews held in the second year of the program the administrators continued to cite some parent opposition to the program, aspects of busing and inadequate lunchroom facilities as problems to be dealt with.

When asked to indicate the accomplishments of the Community Zoning Program, the administrators interviewed cited the following in evidence during the first and second years of the program:

a. There is evidence of increased understanding between white and Negro parents and pupils.

b. Average class size was much lower at the beginning and continues to remain low.

c. The use of OTP (Other Teaching Personnel) specialists in music, art, science, reading, mathematics and library has provided opportunities for individualized and small group instruction.

d. Some parental dissatisfaction with the program has been eliminated.

e. The number and quality of textbooks and supplies has increased.

The administrators were also asked to make recommendations which might improve the program and the following are a number made during the first and second years of the program. Most are generally applicable to the program as a whole while some may apply to one or more schools.

a. Top priority should be given to the appointment of experienced teachers.

b. Classes for disruptive pupils similar to junior guidance classes should be organized at the discretion of the principal.

c. In planning future school pairing community preparation should be undertaken for a much longer period.

d. The Community Zoning Program should become part of the More Effective Schools Program and receive all increased services the latter does.

e. The selection of teachers and the use of OTP's should be left to the discretion of the school principal.

Ethnic Composition of Pupil Register

A more favorable ethnic balance was achieved in the eight zoned schools as a result of the school pairings. Four of the schools which enrolled predomonantly Other pupils the year before pairing (P 149Q, P 148Q, P 112Q, and P 8K) enrolled considerably more non-Other pupils in the first year of the experiment. Prior to pairing these schools each enrolled less than 15 per cent Negro pupils; after pairing the schools now enrolled from 23.7 per cent to 41.5 per cent Negro pupils. In the remaining four schools (P 127Q, P 11Q, P 92Q, and P 7K) which had a pupil register composed of from 63.1 per cent to 99.0 per cent Negro pupils the year before pairing, these schools now enrolled from 39.5 per cent to 57.2 per cent Negro pupils in the first year of the zoning plan. Analysis of the data on ethnic composition of pupil register in the second year indicate that the favorable balance is being maintained.

Average Class Size and Pupil-Teacher Ratio

Analysis of the class size and pupil-teacher ratio data for the eight zoned schools during the first and second years of the program shows that these have remained considerably below comparable data on class size and pupil-teacher ratio for city-wide elementary schools. Average class size for the first and second years of the Program in the eight schools was 23.9 and 22.5 pupils respectively and were 5.2 and 6.2 pupils below first and second years' class size figures for city-wide elementary schools. The pupil-teacher ratio in the zoned schools which reflects the impact of additional teaching positions in a school has also been considerably lower during both years studied than similar ratios in city-wide elementary schools; the differences exceeding 6 pupils in both the first and second years of the program.

Pupil Attendance

Analysis of data on pupil attendance during the first year of the program showed that in all but two schools, the rate of attendance declined from the previous year. In the second year of the program, this was completely reversed and all but one school, showed an increase in attendance rates from the previous year. During both years studied the upward and downward changes in attendance rates were on the order of two per cent or less and there is insufficient evidence at present, to determine whether these upward or downward changes may be attributable to school pairing.

Pupil Mobility

An analysis of the effect of school pairing upon pupil mobility was completed and showed that during the first year of the zoning program the mobility rate for each of the eight schools in the program increased from the previous year. The data also showed that mobility was more apt to occur among the children in the lower grades as reflected by the fact that, without exception, those schools that were reorganized to house only grades 1-2, 1-3, or 1-4 had higher mobility rates than those reorganized to include only grades 5-6 or 4-6. Analysis of the mobility data for the second year of the plan showed the reverse of what occurred in the first year. In six of the eight schools studied, the mobility rate declined from the previous year. However, there is not, as yet, any clear indication of the nature or extent of the impact of school pairing upon pupil mobility.

Pupil Discharges

Analysis of data on pupil discharges in the eight zoned schools in the first and second years of the program showed that in the first year, a total of 1,372 pupils or 26.1 per cent of the total number on register were discharged. This rate was considerably above the city-wide annual discharge rate of approximately 12 per cent. Among the ethnic groups, it was seen that the respective discharge rates for Negro, Puerto Rican and Other pupils were 14.1, 29.1 and 35.5 per cents. In the second year, the discharge rate for the eight schools combined declined to 21.1 per cent of the total number enrolled with very slight changes in the discharge rate for Negro and Puerto Rican pupils, but a considerable drop in rate for Other pupils (10.3 per cent). In addition, the data showed that pupil discharges to other public schools in New York City generally reflected the ethnic composition of the pupil enrollment in the zoned schools. However, pupil discharges to parochial and private independent schools and to schools outside New York City were disproportionately Other.

Pupil Costs of Instruction

This section presents an analysis of such instructional costs as actual salaries paid to staff, expenditures for school supplies and equipment, and custodial expenditures (labor and supplies) in the eight Community Zoned schools before and after the program was implemented. The data show that in the first year of the program, the per pupil cost of instruction in the eight zoned schools combined was $555.91 and represented an increase of 42.95 per cent over the previous year. Analysis of these cost data for each school separately showed that per pupil costs in each increased considerably from the previous year. This increase was primarily the result of the assignment of additional pedagogical and non-pedagogical personnel to the schools in order to reduce class size and provide opportunities for a quality education program. It should also be noted that a portion of this cost increase may be attributed to additional expenditures resulting from general pay increases granted to all pedagogical personnel and normal annual salary increments, factors completely unrelated to community zoning. Analysis of similar expenditures data for the second year of the program showed only slight increases in pupil costs from the previous year for all eight schools combined and for each individually and indicate that the unit cost per pupil level established in the first year is being maintained.

Achievement Tests

The predominant finding resulting from the analysis of standardized test results is that nearly all pupil groups and subgroups improved in standing in relation to national norms and predictive or expected achievement levels.

Pupils with higher achievement scores at the beginning of the experiment made greater improvement than pupils of lower initial standing. This fact was true regardless of pupil ethnic group. Nevertheless, since Negro and Puerto Rican pupils in general attained lower scores on the initial tests, as a group they showed less improvement over the experimental period than did other pupils. This finding was demonstrated both when scores of pupil groups were compared and when individual pupil scores were analyzed. The tendency of pupils of lesser competence to improve at a slower rate is a common finding in educational and psychological research.

A separate analysis was made of the factor of pupil travel, i.e. the reading achievement of pupils attending the original home school as contrasted with the achievemant of pupils travelling longer distances to the new school. With respect to the Negro groups the findings were inconclusive; however, for the Other pupils, the Home groups showed greater gains in reading than the Travel groups, at all grade levels.

To repeat, the main finding concerning achievement is that pupils in all schools demonstrated an improved standing in relation to national norms at the end of the experimental period. Very frequently the improvement attained exceeded the expected gains based upon national norms.

Changes in social attitudes and behavior

In order to determine whether the Community Zoning Program resulted in integration having individual social and psychological consequences, observations of pupils were made in the eight fully zoned and two partially zoned schools. Pupils in a total of fifty randomly selected classrooms in the ten schools were observed during March and April 1966. The results of the observations showed that there was evidence of personal-social integration among ethnic groups in the classes with no functional awareness of ethnic differences on the part of teachers or children.

Social relationships among pupils in the fourth, fifth, and sixth grades in the zoned schools were assessed by means of an analysis of their personal preferences for each other. These pupils were asked to make first, second, and third choices from among their classmates to work with them on a social studies project. This choice was requested twice in each of the first and second years of the program; however, only data on first choices are presented here because they are representative of second and third choices. Analysis of the data in ethnic terms showed that in both the first and second years both Negro and white pupils generally chose pupils from their own ethnic groups as their first choices. In the second year Negroes tended to select Negroes a little less often but the white pupil's pattern of selection did not change from one year to the next. Puerto Rican pupils tended to select first choices in a more balanced fashion from among the three ethnic groups.

The pupil's school behavior with respect to the individual child's development and his relationship with his classmates was assessed by means of teacher ratings of pupils. Pupils in grades two through six in both school years were rated by means of a Personal and Social Growth Scale twice in both school years by the teacher on ten items concerned with classroom behavior. The ten items were categorized into two broad groupings of Satisfactory and Unsatisfactory, each containing five items.

The findings showed that second and sixth grade pupils from each of the three ethnic groups in the Zoned schools showed a high degree of personal-social adjustment during the school year when rated by the teacher on such negative items as, shows lack of respect, gets into fights, uses obscene language, and talks out of turn. Second grade pupils in each of the three ethnic groups tended to play more with pupils outside their own ethnic group than did sixth grade pupils. When rated on the positive items, second and sixth grade pupils from the three ethnic groups were generally found wanting in helping other classmates or expressing gratitude. Differences in the level of personal-social status among the ethnic groups were evident only when the pupils were rated on the following positive items: shows enthusiasm and works to potential. Here, considerably higher proportions of Other pupils were rated satisfactory than Negroes or Puerto Ricans.

Teacher reactions to the Community Zoning Plan

Teacher attitudes towards the Zoning experiment were obtained from a Teacher Reaction Sheet sent to all teachers in grades 2 through 6 in all schools in April 1965 and April 1966. The Reaction Sheet consisted of ten statements designed to obtain information regarding teacher attitudes toward the plan. The findings of the analysis of teacher responses to the Reaction Sheet showed that during both the first and second years of the program, teachers had mixed feelings regarding its effectiveness. In both years the preponderance of the teachers generally felt that such personal-social aspects as increased understanding, developing respect for others, and promoting community understanding benefited from the program. However, in both the first and second years of the program, the majority of the teachers did not believe that the program promoted an optimum total learning situation for all the pupils and that the money being spent on the program could be better spent on reducing class size in the neighborhood elementary schools. More teachers felt this way about these two areas in the second year than in the first. Considerable proportions of the teachers in the first year of the program also indicated that they opposed expansion of the program to include more schools and either favored discontinuance of it entirely or were undecided about it. In the second year, the attitudes of the teachers went even further in the direction of either curtailing expansion of the program or discontinuing it entirely.

The problems most frequently experienced by teachers in the zoned schools were obtained by means of a Teacher Problem Sheet completed by the Teachers at the end of the first and second years. The findings showed that the two major problems cited by the teachers in both years were pupil discipline and difficulties encountered in teaching pupils with a wide range of abilities, problems typical of many elementary schools where no experimental programs have been initiated.

Curriculum Practices and Materials

The results of interviews and questionnaires administered to principals and teachers in the eight Community Zoned schools in both the first and second school years of the program requesting information on curriculum adaptation, utilization of teacher time in the classroom, teacher use of curriculum materials, teacher evaluation of curriculum bulletins, and the curriculum as related to the self-image of disadvantaged children are summarized as follows:

1. In both years of the study, the principals reported a wide range of approaches to curriculum implementation and adaptation. This included greater emphasis on Negro history in the social studies and emphasis on brotherhood in all areas of the cirriculum. In the second year there was particular emphasis on language arts achievement.

2. The principals reported that the increased use of OTP's (Other Teaching Positions) accelerated the already existing trend towards using subject area specialists in the elementary schools.

3. Teachers reported that in both years the time spent by OTP's in instructing the pupils generally averaged two and a half hours per children's week or approximately 10 per cent of the time and that the proportion of time teachers and OTP's spent in direct pupil instruction, control activities, instruction-related activities, administrative and other activities was about the same in both the first and second years of the program.

4. Analysis of the teacher responses indicated that in the second year of the study, teachers moved more in the direction of using self-prepared curricular materials than Board of Education materials. The use of commercially prepared materials also increased in the second year and may be attributed, in part, to an increase in funds available to the schools for purchase of such materials. In general, there was a trend among the teachers towards seeking more diversified and more individualized materials.

5. In evaluating the Board of Education prepared curriculum bulletins according to the adequacy of their stated objectives, suggested methods of instruction, and description of instructional materials, the teachers generally agreed, in both years of the study, that the objectives were satisfactorily stated and that the bulletins were satisfactory also in their description of methods of instruction and materials.

6. In attempting to raise the self-image of disadvantaged children in their classes, the approach of the teachers generally aimed at encouraging children to work together with a feeling of equality and mutual respect, achieve academically, and accept responsibilities in the classroom.

Discussion

When interviewed, administrators involved in the Community Zoning Program reported many advantages and some problems resulting from the program. Advantages cited more frequently included considerably reduced class size, increased understanding between white and Negro pupils and parents, and increased numbers and improved quality of textbooks. They also reported that, to a large extent, they had been able to solve most of the problems encountered.

The evaluation also found that ethnic balance within each of the eight Zoned schools was considerably improved and being maintained during both years of the program and that average class size and pupil-teacher ratio in these schools was considerably below those for city-wide elementary schools. Pupil attendance was generally found to be good in both years and pupil mobility was found to have declined in the second year. The pupil discharge rate for all schools combined for both years was generally above expected city-wide figures while unit costs per pupil for instruction were considerably above those for the same schools prior to pairing and also above similar costs for all city-wide elementary schools.

Analysis of the standardized test results showed that nearly all pupil groups and subgroups improved in standing in relation to national norms and predictive or expected achievement levels. Frequently the improvement exceeded the expected gain based upon national norms.

The findings with respect to pupil social attitudes and behavior were generally favorable. There was observed evidence of personal-social integration among ethnic groups in the classroom. In assessing social relationships it was found that both Negro and Other pupils generally selected pupils from their own ethnic groups as first choices to work together on a classroom social studies project. The pupils from the three ethnic groups were generally found to show respect, avoid getting into fights, and not talk out of turn. In showing enthusiasm and working to potential, considerably higher proportion of Other children were found to be satisfactory than either Negro or Puerto Rican children.

Teacher reaction to the program was found to be mixed. While the teachers felt that the program increased understanding and developed respect for others among children in the program, they did not feel that it promoted an optimum learning situation for all and a considerable number opposed expansion of it. The majority felt that the money could be better spent on reducing class size in neighborhood elementary schools.

With respect to the curriculum in the paired schools, it was found that there was considerable curriculum implementation and adaptation, including greater emphasis on Negro history in the social studies. Teachers tended to use self-prepared curricular materials over Board of Education prepared materials, especially in the second year of the program.